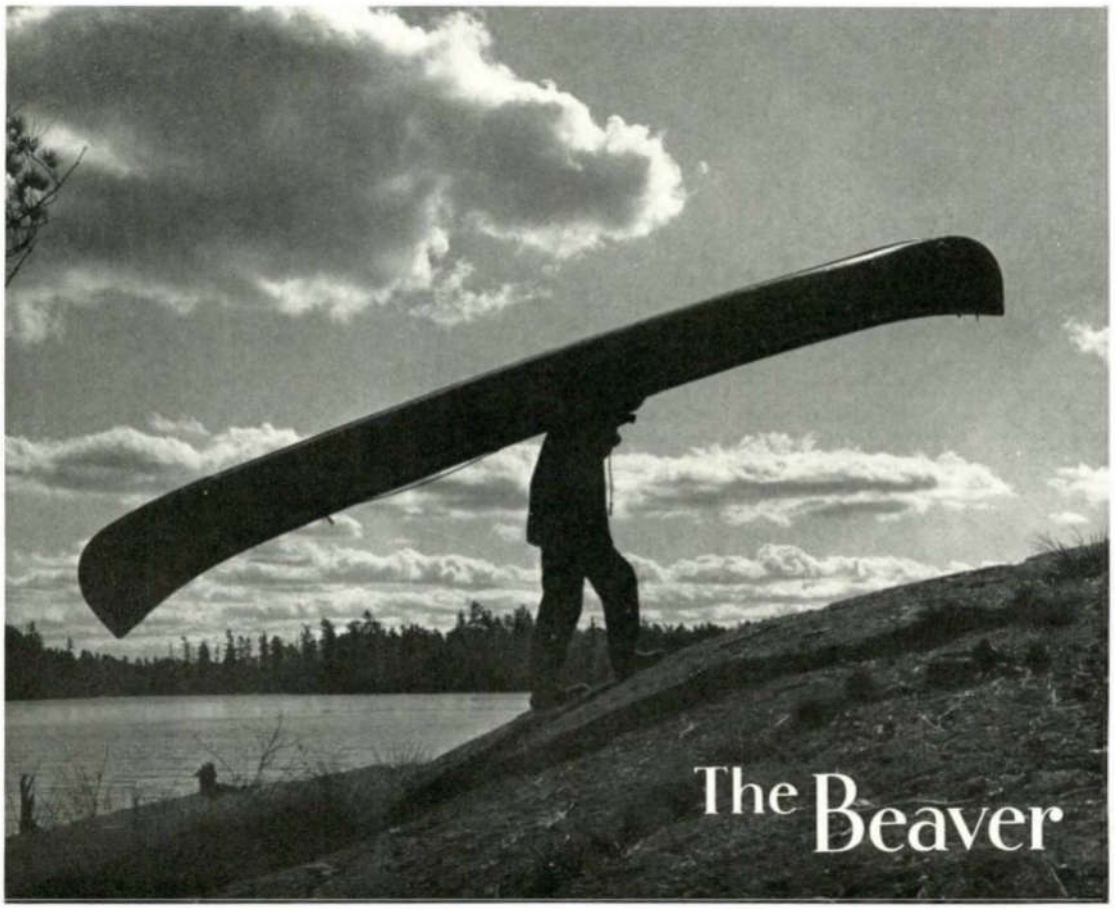
The Beaver

AUTUMN, 1954

MAGAZINE OF THE NORTH



The Beaver

Clifford Wilson, Editor.

Temagami silhouette *Richard Harrington*

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TWO DOLLARS A YEAR

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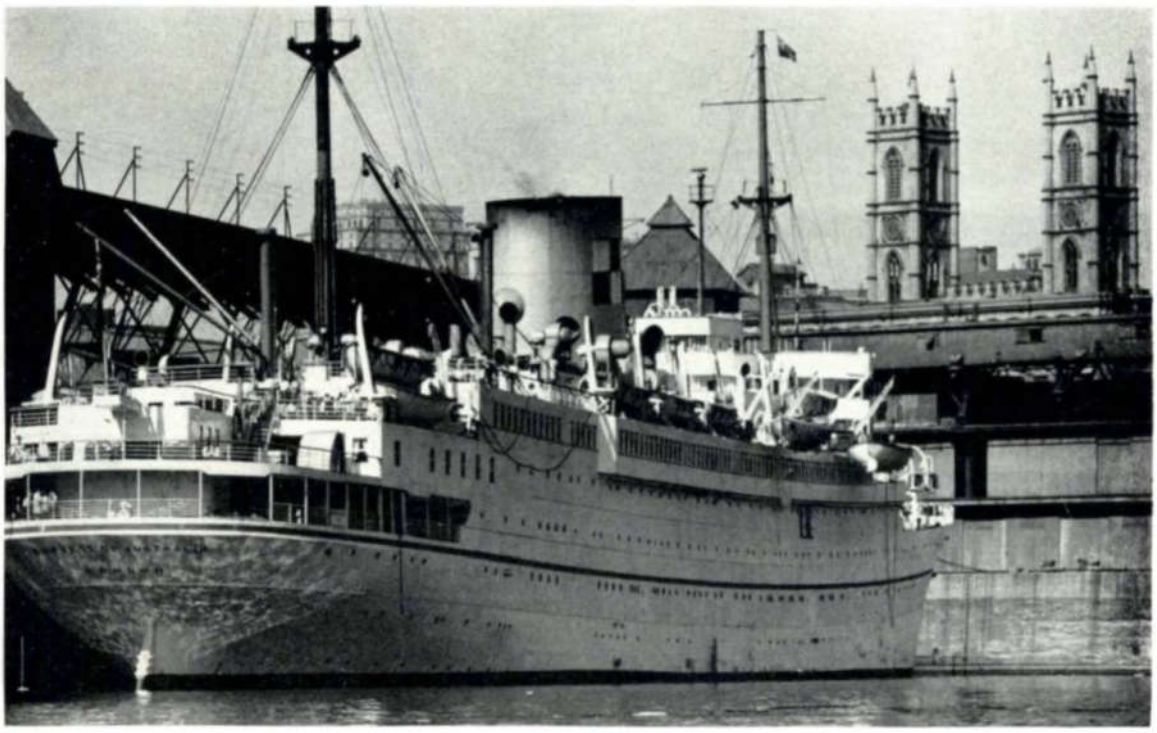
St. Lawrence Seaway

The first part of a picture story about the historic waterway that stretches west from Montreal, soon to undergo enormous changes when the rapids are dammed and the seaway is put through.

By ROSEMARY GILLIAT

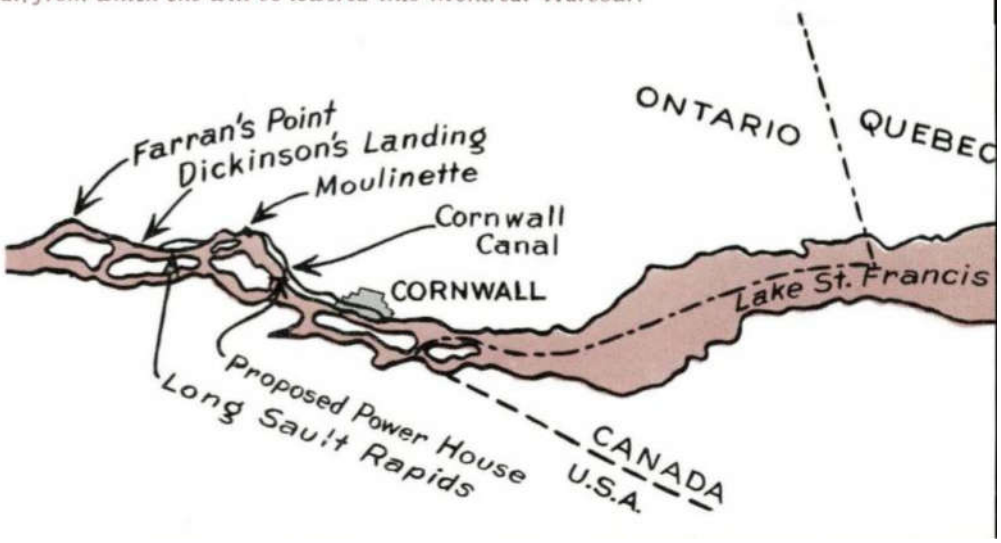
From the cupola of the "Sailors' Church" on the Montreal waterfront. Notre Dame de Bonsecours raises her hands in blessing on all who go down to the sea—or up to the lakes—in ships.



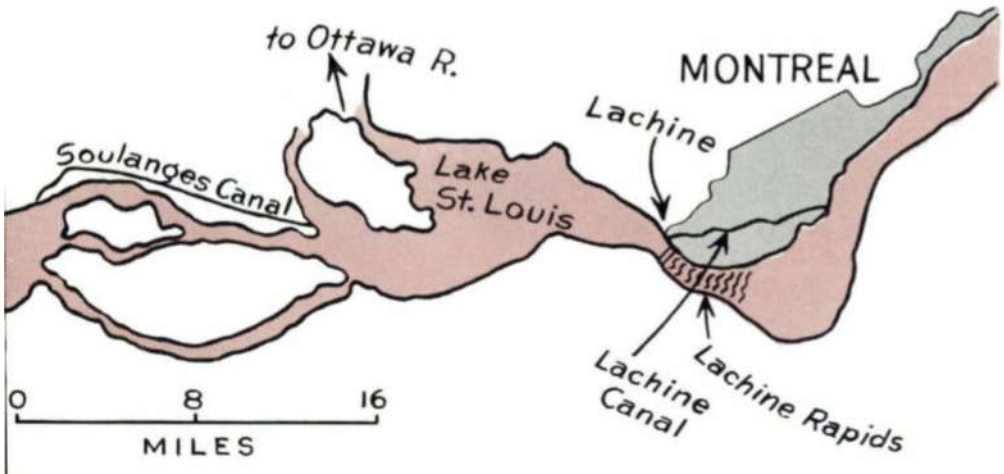
Great ocean vessels, almost as large as Canadian Pacific Empress of Australia *seen here at Montreal, will be able to reach the Great Lakes when the deep waterway is completed.*

Rosemary Gilliat is a free lance photographer whose headquarters are in Ottawa. Some of her Yukon pictures appeared in the last Beaver.

The Old Quarter of Montreal, see from the top of a grain elevator. Here, where Champlain traded for furs in 1611, and where Maisonneuve landed in 1642 to found the city, is the head of navigation for most seagoing ships. Wheat from the West is brought down through the Welland and St. Lawrence canals to be stored in the elevators and poured into the holds of ocean freighters. The shallow-draught ship in the foreground is entering the last lock of the Lachine Canal, from which she will be lowered into Montreal Harbour.

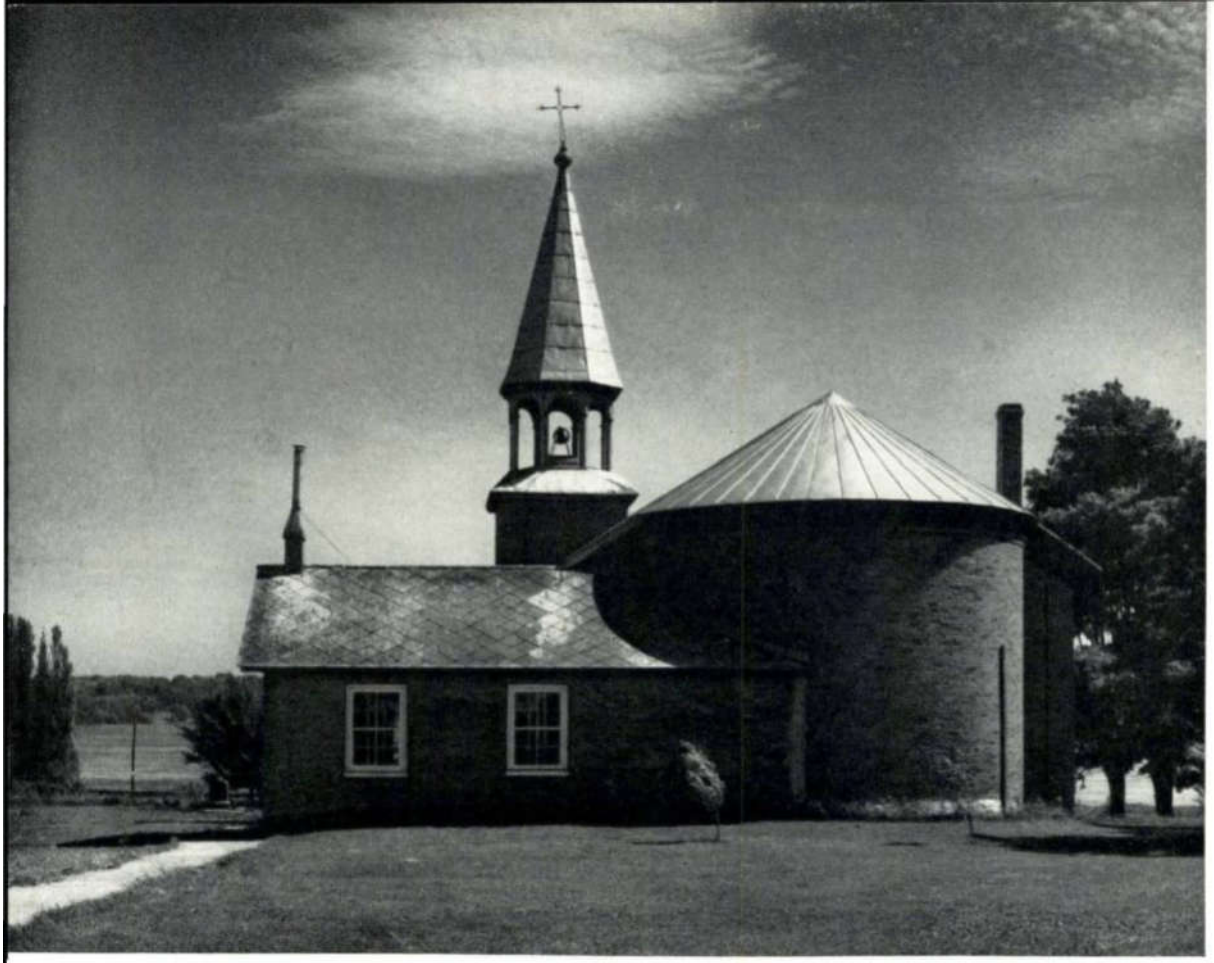


The first Lachine Canal, where the big "Montreal" canoes of the fur traders gathered for the long voyage west to the head of the lakes, now serves only as a waterway for pleasure craft.



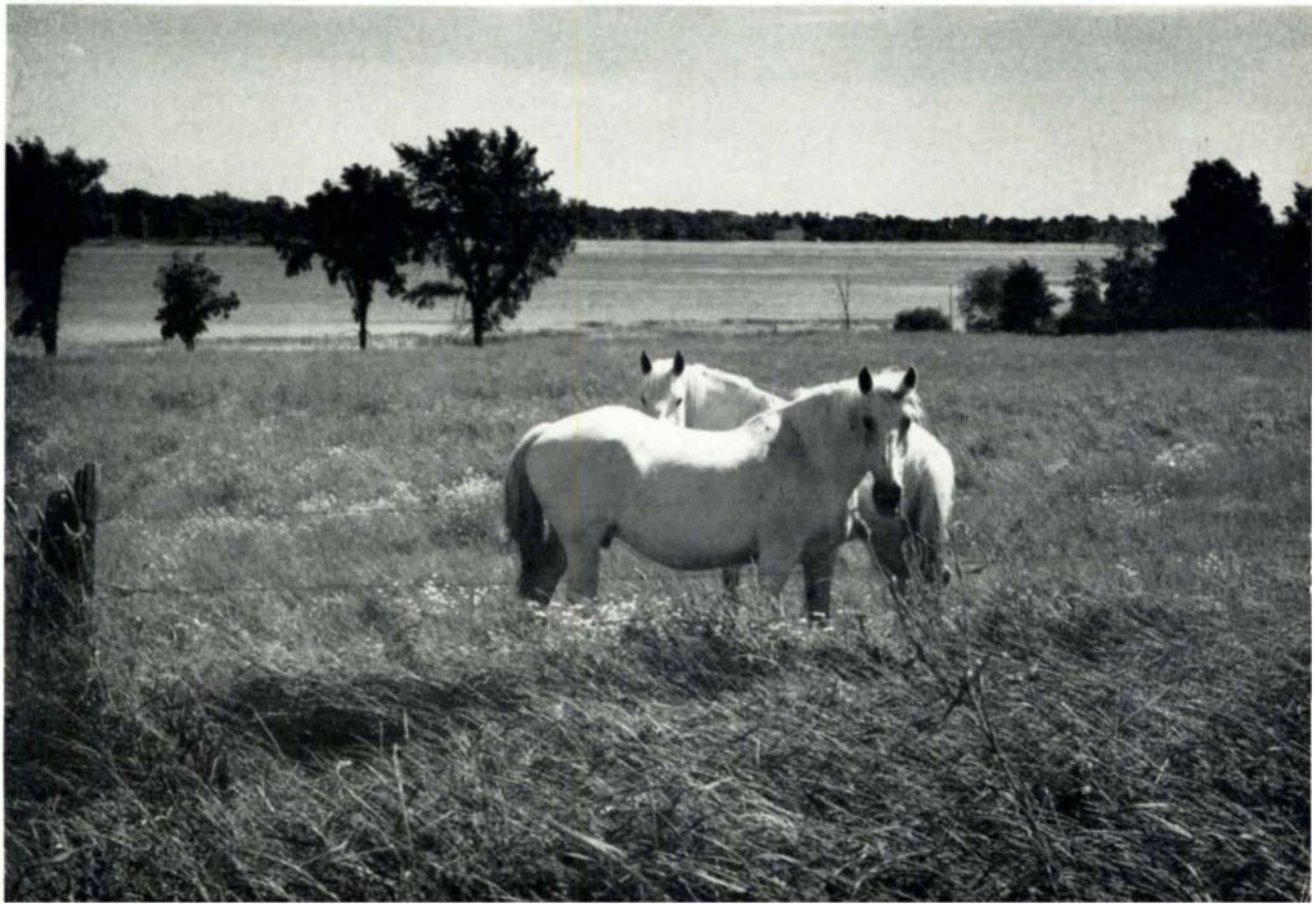
This little freighter bound for the Great Lakes has crossed the stormy Atlantic, made her way up the St. Lawrence to Montreal, and then by the present 14-foot waterway has reached the pastoral quiet of the Cornwall Canal. Her port of registry is Kristiansand in Norway.

Near the Long Sault above Cornwall, where the first sod was turned on August 10 (St. Lawrence's Day), two engineers from Ontario Hydro headquarters discuss plans for generating power from the international rapids section, a project that will alter the lives of many riverside residents. Huge dams will back up the waters to form two lakes—37 and 9 miles long—the famous rapids will disappear, and great areas along the river, that have been inhabited for generations, will be flooded. Ontario Hydro will be responsible for the relocation of communities, farms, homes, stores, and other buildings in the flooded areas of the Canadian side.



One of twenty churches to be affected by the flooding, this 90-year old Roman Catholic church at Dickinson's Landing will be partly submerged. It faces the former stage-coach road that hugged the river bank.

These tranquil riverside fields near Farran's Point, which have been farmed for generations, will one day disappear under the encroaching flood.

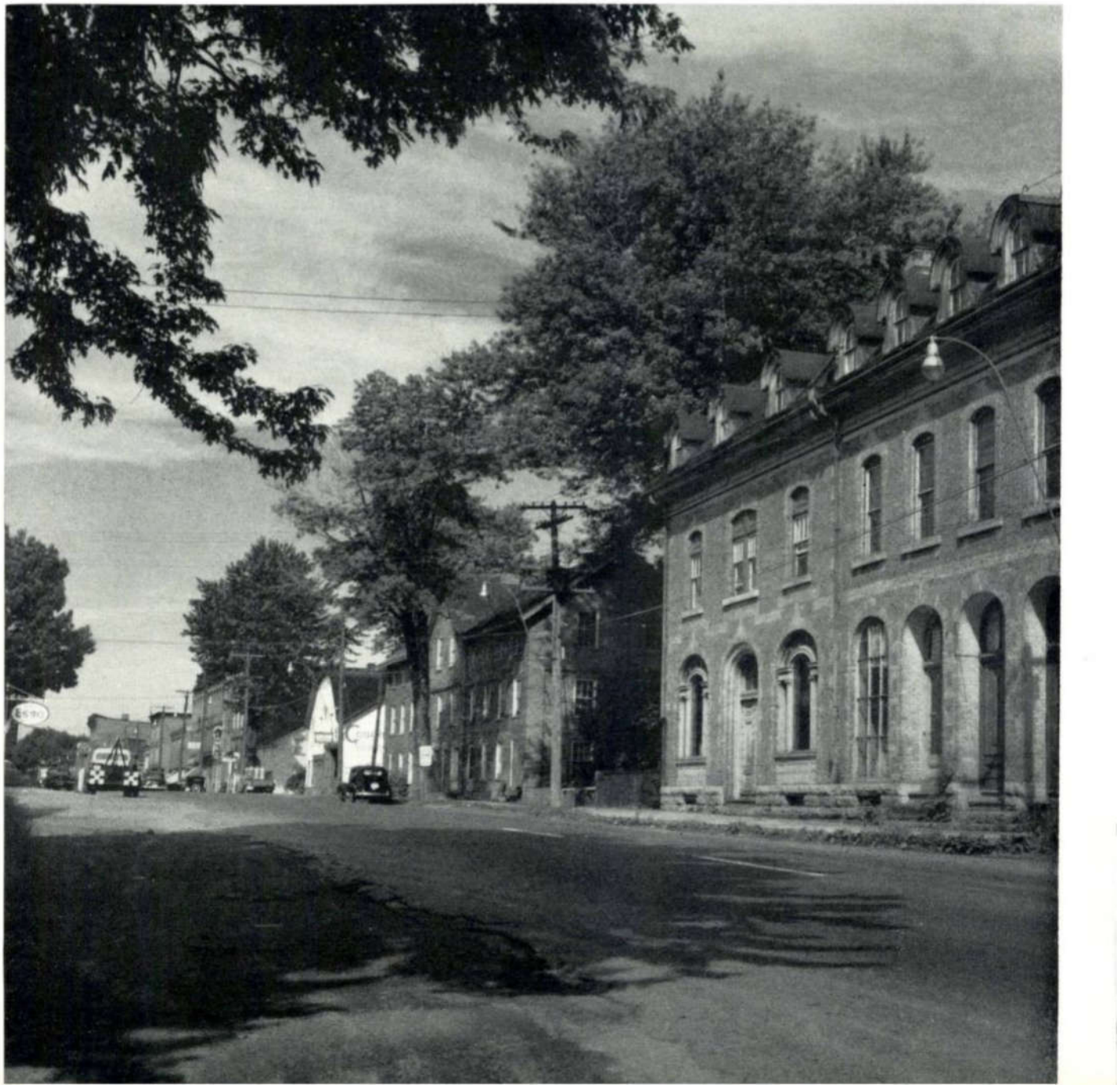


East of Morrisburg stands the Riverside School (right)—whose pupils are here seen playing "The Farmer's in the Dell"—and St. John's Lutheran Church. The present church was erected 92 years ago, and succeeded a smaller one built in 1784, which was the first Lutheran Church in what is now Ontario. To celebrate St. John's 170th anniversary, members of the congregation volunteered to paint the church and here one of them, a farmer of U.E. Loyalist stock, does his stint while the pastor chats with him.

Before the 175th anniversary is celebrated, both church and school will probably be abandoned, since the river will eventually cover the ground on which they stand.

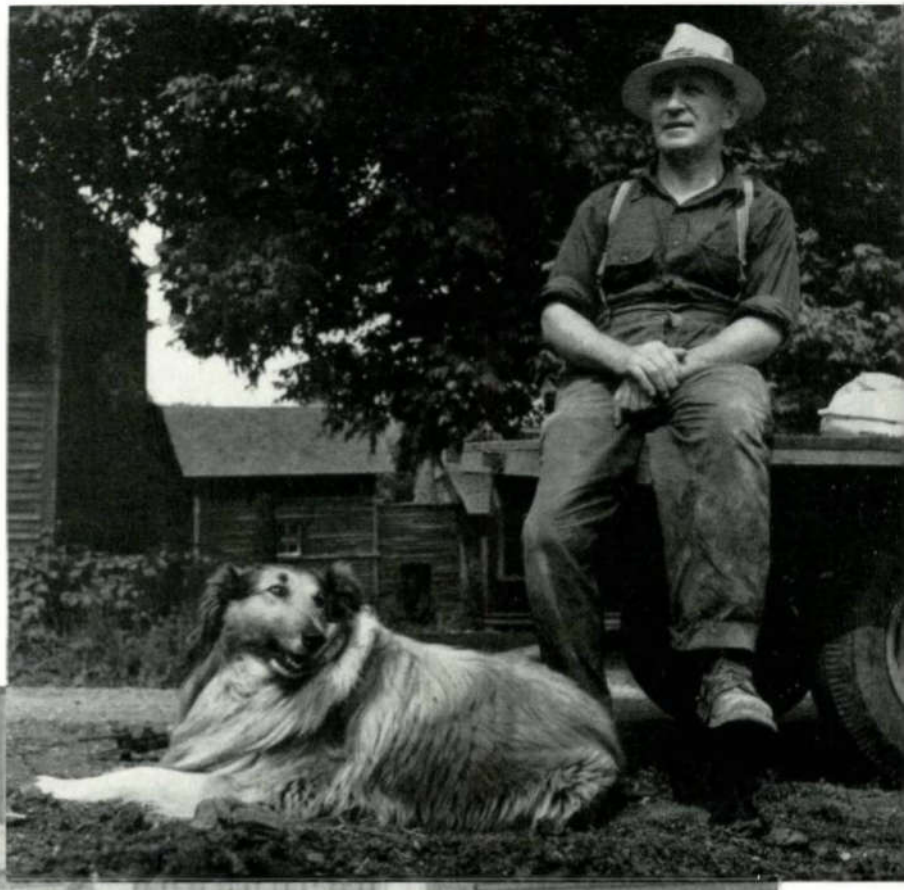
Right: A Morrisburg mother and her children look out from the veranda of their house—a former stage-coach inn—over the canal and the river, where day and night the freighters pass close at hand.

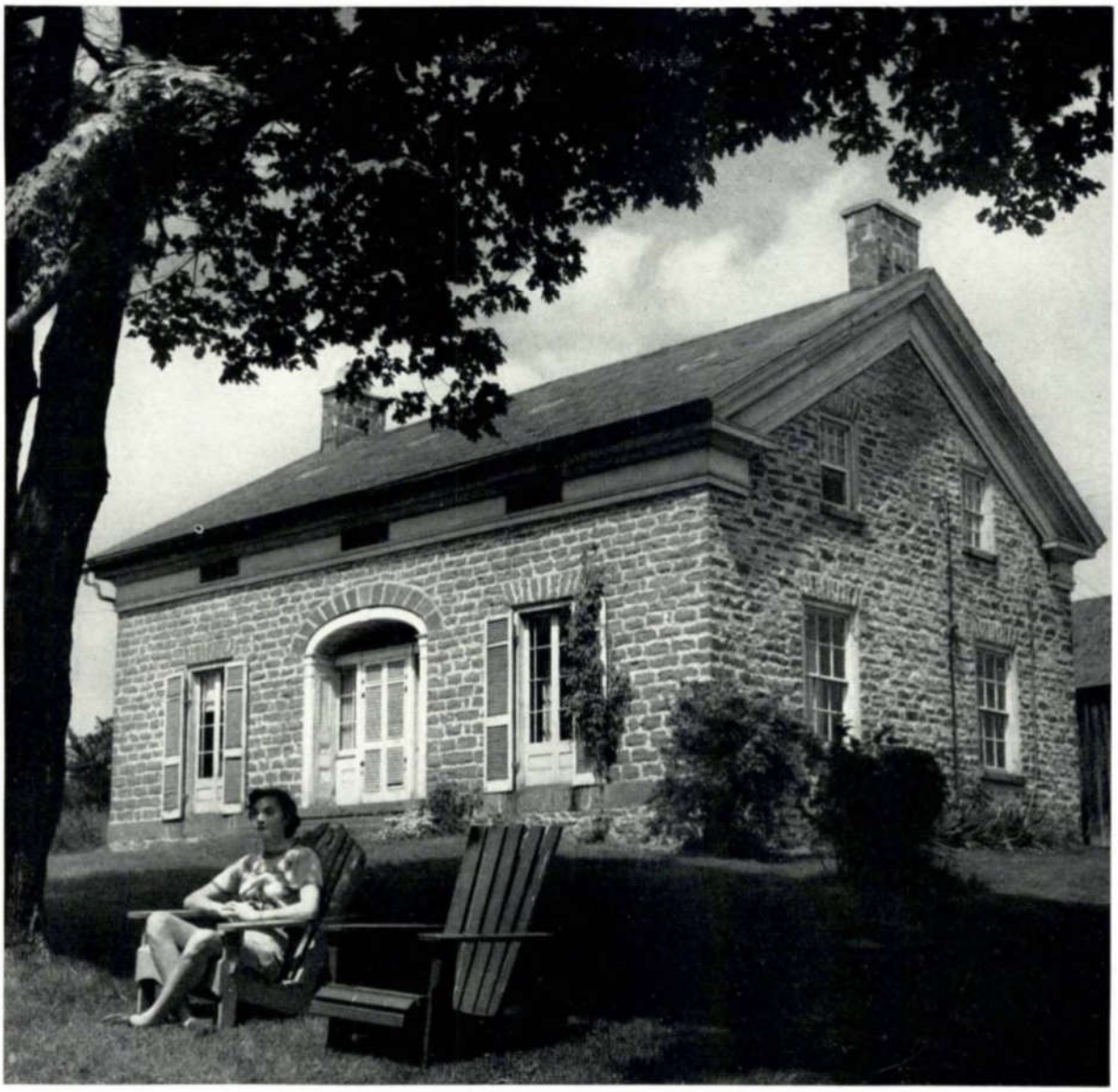
Below: The main street of Morrisburg—part of the main highway along the St. Lawrence—which will lie under about ten feet of water.



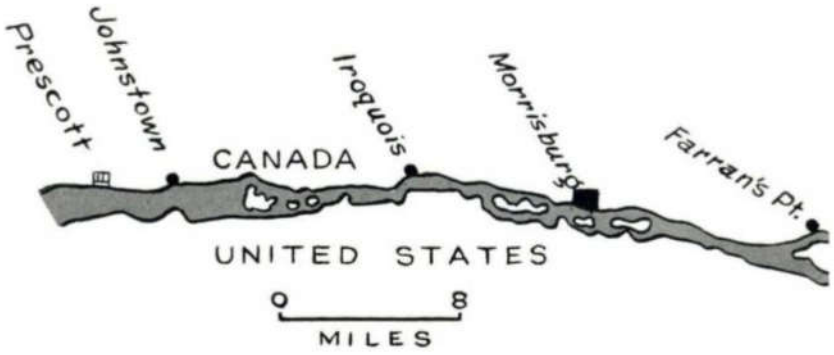
Right: George Brouse is a farmer near the village of Iroquois, which will be totally submerged. He keeps 110 head of pure-bred Holsteins and runs a dairy which supplies a large part of the village. His great-grandfather, William, settled here in the 18th century and was the first member of parliament for the district. His descendants have continued to farm the original grant.

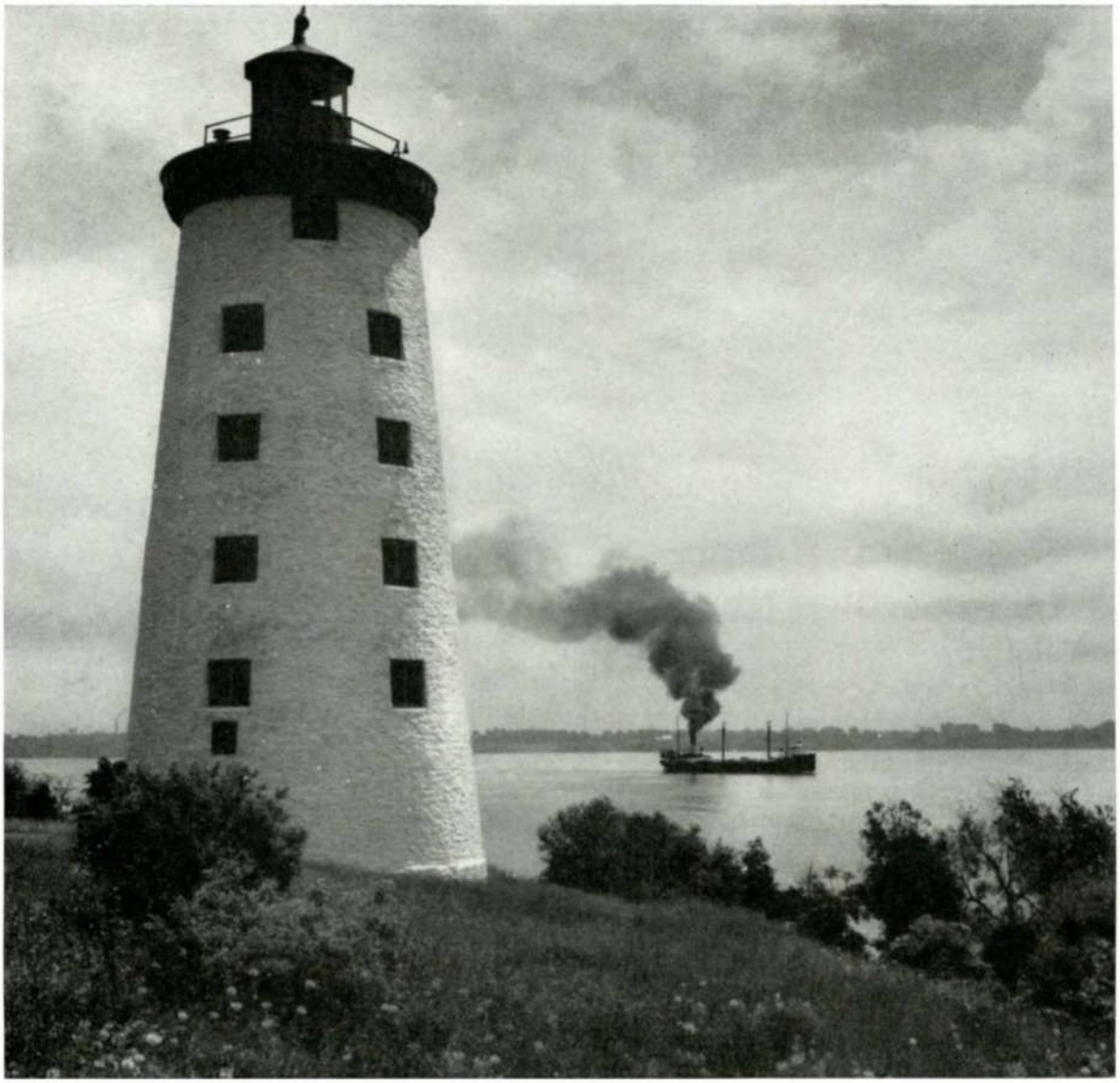
Below: In the cool sitting room of the thick-walled manor house, a fine old stone building that faces the river at Iroquois, sits a descendant of another Brouse—Peter, of the King's Royal Regiment of New York, who was discharged at the close of the war in 1783 and given a grant of land here. Financial compensation cannot wholly make up for the loss of a house and land such as this, where generations of the same family have lived their quiet lives.



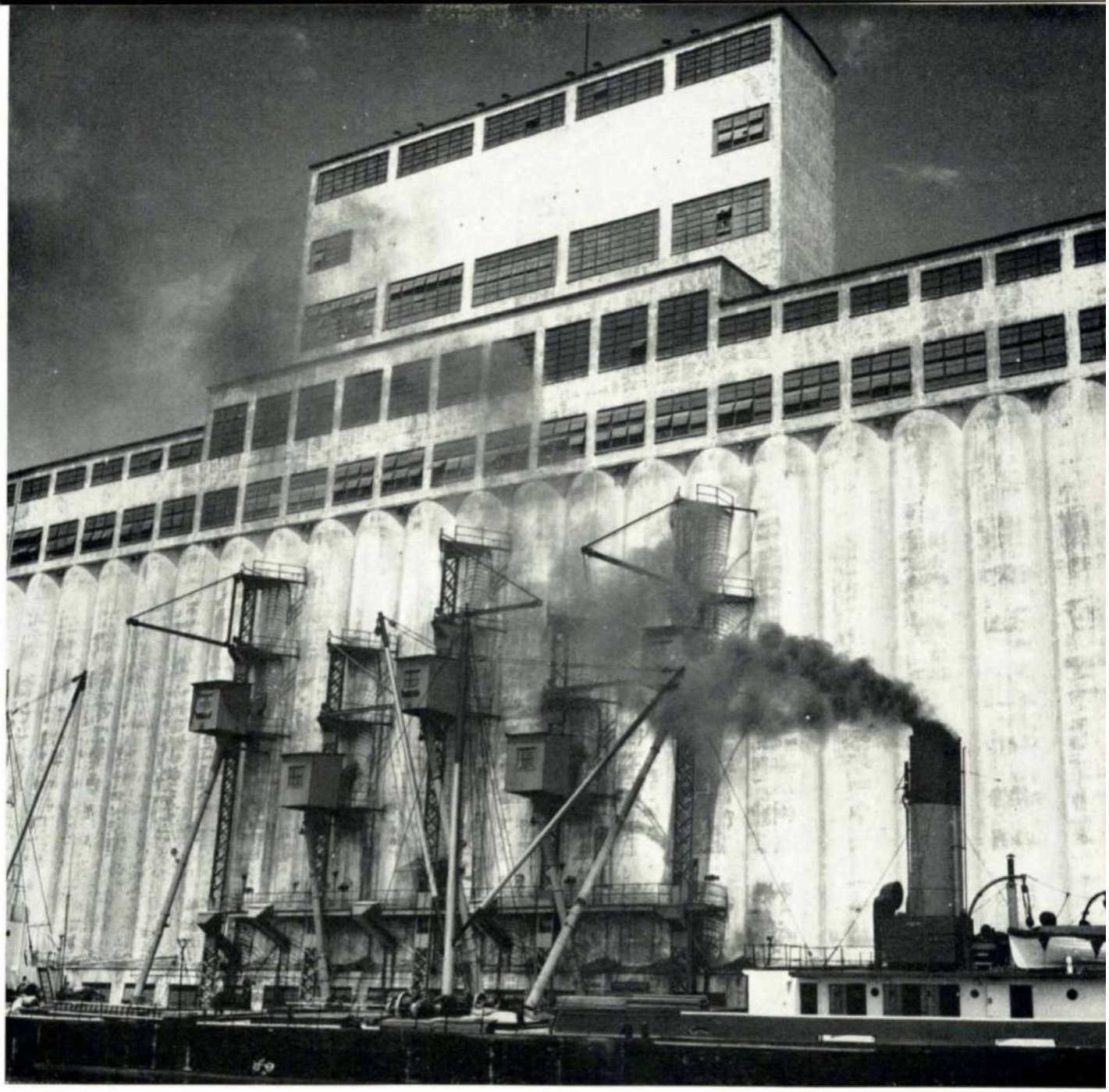


On her lawn near Iroquois, this young housewife looks down to the river, wondering whether the water will reach to her doorstep—or beyond. The old stone house where she lives is a fine example of early domestic architecture in this long-settled part of Ontario.





This historic stone lighthouse just below Prescott will happily not be touched by the rising water. Originally it was a windmill, built about 130 years ago. In 1838 it was occupied by an invading force of some 200 adventurers from the States, and sixteen Canadian and British soldiers were killed by them before they surrendered. It has served as a lighthouse for over sixty years.



One of the main transshipping points in the present system of moving grain from the prairies to overseas markets, this 5½ million-bushel grain elevator stands at Johnstown near Prescott. A "canaller" is seen loading grain brought down from the lakehead by a larger ship which draws too much water for the present 14-foot canal. When the deep waterway is built, these large "lakers" will be able to go all the way to Montreal and beyond.

"Her Ladyship, My Squaw"

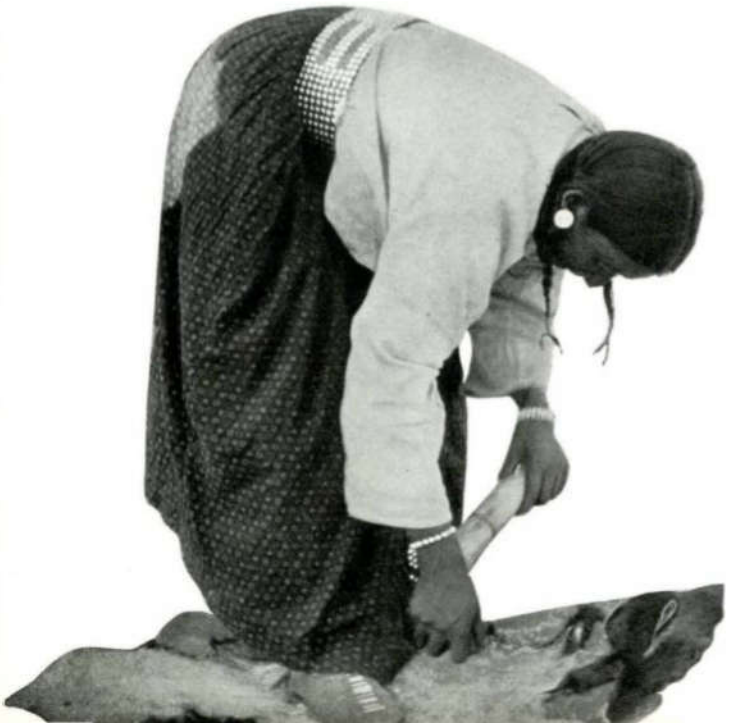
Indian women played an important part in the white man's exploration of the Canadian West.

by Marjorie Wilkins Campbell

NO one can read the story of Canada's first major industry, the fur trade, without becoming aware of the contribution of Indian women not only to the industry but to the discovery of what is now Canada. Probably, without them, discovery of the northwestern third of the continent would have been considerably delayed. Certainly we should have had a very different history.

Alexander Henry, the Younger, was one of many white men to pay homage to Indian women. Henry, nephew to the tough old Montreal trader, Alexander Henry, the Elder, became a partner in the North West Company around 1800. Shortly after, while a bourgeois at the important Pembina trading post, he gave the customary New Year's party. When Henry returned to his own apartment after the festivities he found an Indian girl awaiting him. He told her to leave. The girl refused. Realising that "the devil could not have got her out," Henry went off buffalo hunting. But "the encumbrance" remained. In time she endeared herself to him, and he took her with him when he went to take charge of the posts on the Upper Saskatchewan. There, at Fort Vermilion and later at Rocky Mountain House, she was first lady. Henry referred to her as "Her Ladyship, My Squaw." Not only did he come to love her, but he found her extremely useful.

Blackfoot woman dressing a skin with a stone scraper in a handle of elk antler.



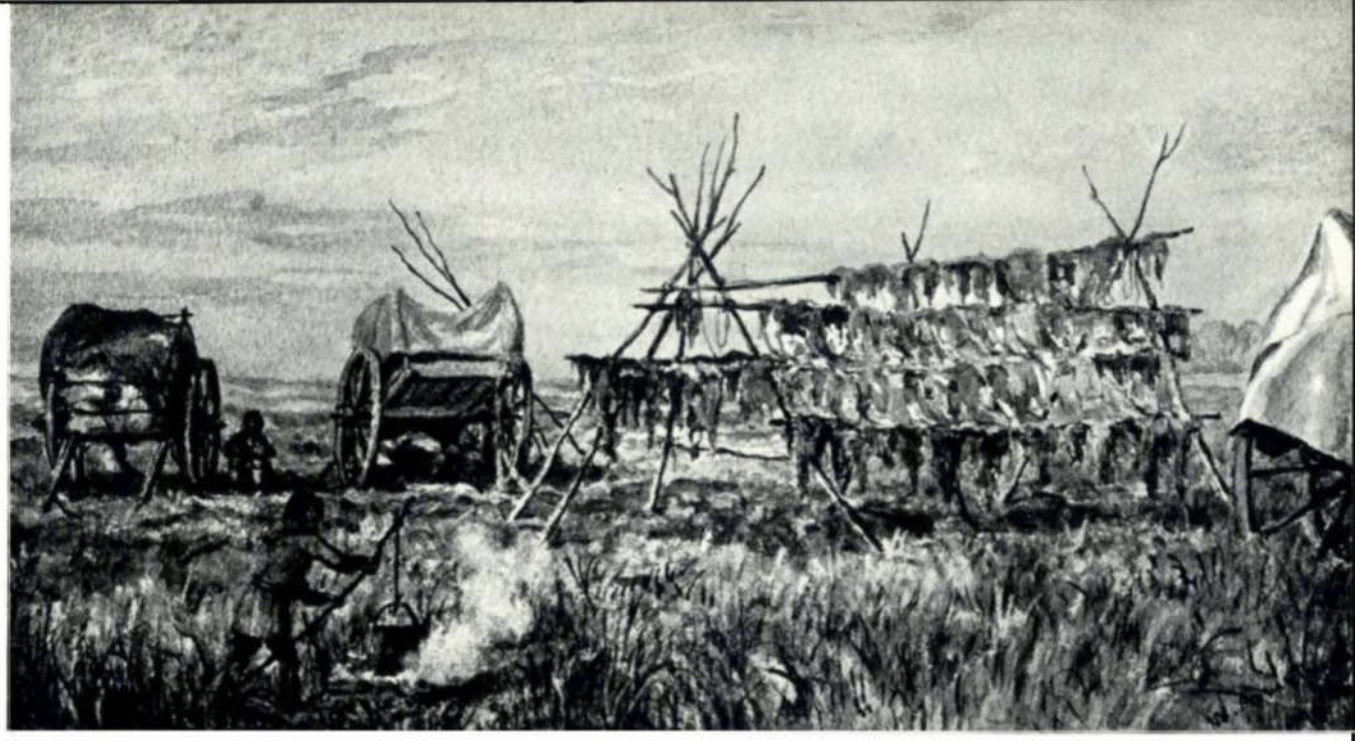
Henry's journals, like those of Daniel Harmon, Alexander Mackenzie, David Thompson and others, are peppered with references to Indian women's usefulness: "women pounding meat for pemmican" . . . "women making snowshoes" . . . "women gathering gum for canoes" . . . "women drying buffalo hides for boats" . . . "women hauling firewood" . . . "women gathering and drying berries." Behind these casual journal entries lie the hard facts concerning the economics of northwestern exploration.

In the early decades of the nineteenth century when buffalo roamed the prairies in great herds, a buffalo hunt was the finest combination of business and pleasure ever enjoyed by men. But as soon as the sport was over, Indian women's work commenced. They dressed the game and hauled meat and hides to the camp where already a series of fires had burned to embers. When they had cut the flesh into thin strips, each strip was dried, either over the embers or in the sun. And then began the long, laborious process of pounding.

Out on the prairies dried buffalo meat was pounded on great buffalo hides, skin side up. On the parkland along the Saskatchewan River logs were used. But in either case the pounding went on all day, through many moons of each year, and the rhythmic *lub-dub, lub-dub, lub-dub* was as much a part of a fur trader's life as the smell of drying meat. Other women scraped buffalo hides and stitched them into bags, fur side out. Into these they packed fifty pounds of pounded meat, added several handfuls of fresh or dried saskatoon berries, and sealed the whole with about forty pounds of fat, melted from the entrails and from the *depouilles* along the buffalo's spine and carefully blended.

Pemmican kept well, even through summer's heat. It was the most nourishing single item of diet ever known. On it men could paddle all day, stand heat and cold, and remain cheerful. And, what was extremely important, pemmican was light; in those tightly packed ninety-pound bags it was ideal for canoe transportation.

Almost as much of the European trade goods imported by the various traders bought pemmican as pelts. Alexander Mackenzie relied on pemmican to explore his mighty river, and to reach the Pacific Ocean. Simon Fraser and David Thompson used it on their long, arduous trips over



Buffalo meat prepared by Indian women drying on the White Horse Plain of Manitoba. From a painting by William Armstrong in the Public Archives of Canada.

the Great Divide and down to the Pacific. It was for decades the staple food of the fur trade. It made possible the exploration financed by the fur trade.

The Indians used buffalo hides stretched about poles for teepees, and to construct rude craft for crossing prairie rivers—bull boats. So did the traders. And like the natives, the traders relied on leather clothes and moccasins—all tanned and cut and stitched by Indian women. In time European woollens replaced leather clothing, because wool kept its shape better when wet and dried faster. But European shoes never replaced moccasins, and each man wore out several pairs a year.

Food, clothing, shelter—for these white men depended on native women entirely. For transportation they owed them another debt.

". . . women gathering gum for canoes." At the several canoe-building depots developed from St. Joseph's Island near Sault Ste. Marie to the Saskatchewan River and beyond, women prepared birch bark and separated out fibres of spruce and cedar roots to make *watape* with which the canoe's patches were sewn. There were many patches on a thirty-foot canoe. During the heyday of the North West Company individual brigades sometimes numbered a hundred of the frail craft. Every seam in every canoe was waterproofed with gum. In a sense gum was to transportation in the canoe era what oil is to modern mechanical transportation.

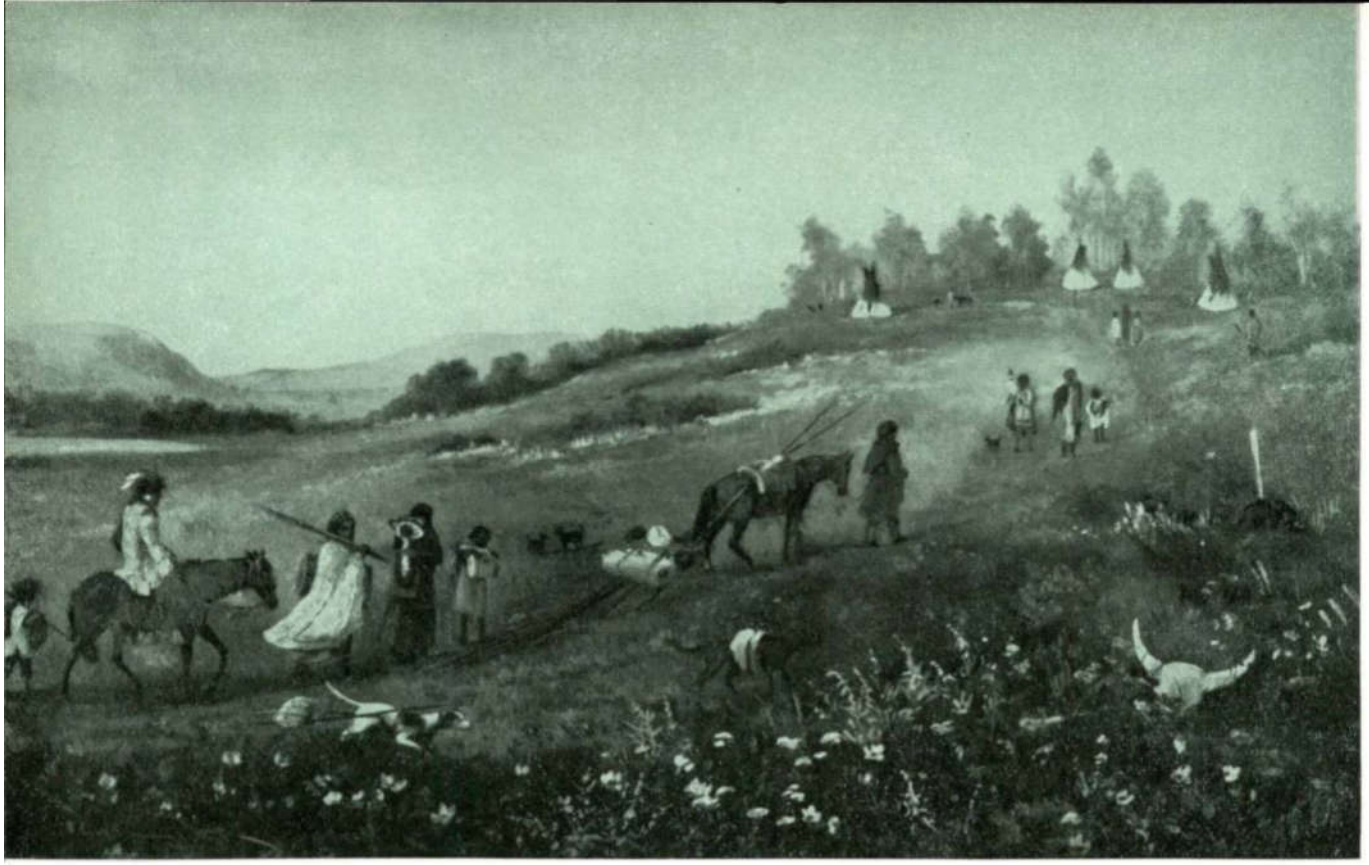
Snowshoes were equally as important. Winter comes early in many of the finest fur trapping areas—Lake Athabasca, the Peace and Mackenzie River basins. The season when traders and trappers use snowshoes is long, and the journeys hard on snowshoes. When Indian women weren't making pemmican or gathering gum they could be occupied treating gut and netting those *raquettes* on which both trade and exploration marched.

And before traders bought their great piles of pelts, there was more work for women. They stretched the slim weasel, the muskrat, otter and mink. They bent willow frames to stretch beaver, the most important fur of all, for in 1793, at its trading peak, the North West Company alone shipped 182,346 beaver pelts.

". . . women carrying." An Indian, especially a proud Blackfoot or Plains Cree would have lost caste and dignity if he ever shouldered a bag of pemmican or a bale of pelts. That was women's work even as late as mid-nineteenth century, from Sault Ste. Marie to Hudson Bay and west to the Pacific. When Samuel Hearne set out to discover the Coppermine River in 1769 his first attempt met failure. Then he acquired the help of Matonabbee, the husky chief with seven husky wives. Hearne soon learned, as his successors were to do, that only with an Indian woman's help could he successfully carry out his explorations.

"Women were made for labour," Matonabbee told Hearne. "One of them can carry, or haul, as much as two

Cree woman gumming the seams of a birchbark canoe.



In this painting done from life by Roper, the lord and master of the family is shown on horseback while his womenfolk walk carrying burdens. *Public Archives*

men can do. They also pitch our tents, make and mend our clothing, keep us warm at night; and, in fact, there is no such thing as travelling any considerable distance, or for any length of time, in this country, without their assistance. Women, though they do everything, are maintained at a trifling expense; for as they always stand cook, the very licking of their fingers in scarce times, is sufficient for their subsistence." With Matonabbee and two of his huskiest wives, Hearne accomplished his perilous journey.

But essential as they were economically, Indian women meant almost as much socially in the early days of the North American fur trade. With no other women within hundreds of miles—the first white woman from Canada, Julie Lajimonière, arrived at the Red River with her trapper-guide husband in 1807—most white men took an Indian wife after the custom of the country, casually for a few months during the winter season or for life. There were no clergy in the northwest until just before union between the North West and Hudson's Bay Companies. The ceremony consisted of gifts to the girl's father "of such articles as he [the white man] supposes will be most acceptable; and among them rum is indispensable" wrote Daniel Harmon; if the girl was particularly attractive the gift might be a horse or a gun.

No one knows when the custom commenced. But Anthony Henday, on his famous 1754 trip to the foothills made a significant entry in his journal. "I have," wrote Henday, "ladies of different ranks to attend me; please to observe the men does nothing but hunt, and we Leaders hath a Lady to hold the thogin with water to our heads when we drink."

The French quickly appreciated Indian women's company as well as their service. Invariably a casual settlement of halfbreed or mêtis women and children grew up about their posts. "Bits of brown" Sir George Simpson came to call them later. British traders from Montreal and those from Hudson Bay varied only in degree from the French in their interest in Indian women.

Some of the "marriages" were most successful. Chiefs' daughters living with white men of education and kindly manners made pleasant homes at the various wilderness posts. David Thompson, the great geographer, married Charlotte, a halfbreed girl of Irish and Chipewyan ancestry,

Daniel Harmon, who could not forsake his Indian wife.

taking her east to civilization when he retired. Daniel Harmon, a young New Englander of strict upbringing who vowed on his way to the Northwest that he would have nothing to do with native women, changed his mind. Various chiefs offered him their daughters, and finally Harmon bowed to custom. On Thursday, October 10, 1805, he wrote the important announcement in his journal:

"This day, a Canadian's daughter, a girl of about fourteen years of age, was offered to me; and after mature consideration . . . I have finally concluded to accept of her, as it is customary for all gentlemen who remain, for any length of time, in this part of the world, to have a female companion, with whom they can pass their time more socially and agreeably. . . . The girl is said to have a mild disposition and an even temper, which are qualities very necessary to make an agreeable woman, and an affectionate partner."

Harmon planned to leave his "woman," who bore him fourteen children, with some man who would appreciate her when he left the Indian country. But—"How could I tear them [his children] from a mother's love, and leave her to mourn over their absence, to the day of her death?" He took her back with him to Vermont.

Harmon found, as did David Thompson, Henry, and others that a white man with an Indian wife enjoyed not only the girl's company and help, but also the trade and protection of her tribe. The latter was particularly important among warlike tribes such as the Blackfeet and Plains Crees and some of the Pacific slope tribes. Indeed, in the Columbia District two traders, Archibald McDonald and Duncan McDougall, took out double insurance by marrying sisters, daughters of the powerful Chinook chief, Comcomly.

Such alliances were economic from the viewpoint of the North West Company, striving to survive against the shorter, less expensive trade haul through Hudson Bay. The economic value became questionable, however, when a man maintained more than one wife at the company's expense, as did Alexander Fraser. In the heyday of the Montreal company, its chief Simon McTavish ruled annually at Grand Portage that partners and employees must provide for their own families. Each year at the great summer meeting the partners agreed, with formal resolutions duly approved. But everyone ignored the resolutions as soon as the meeting was over.

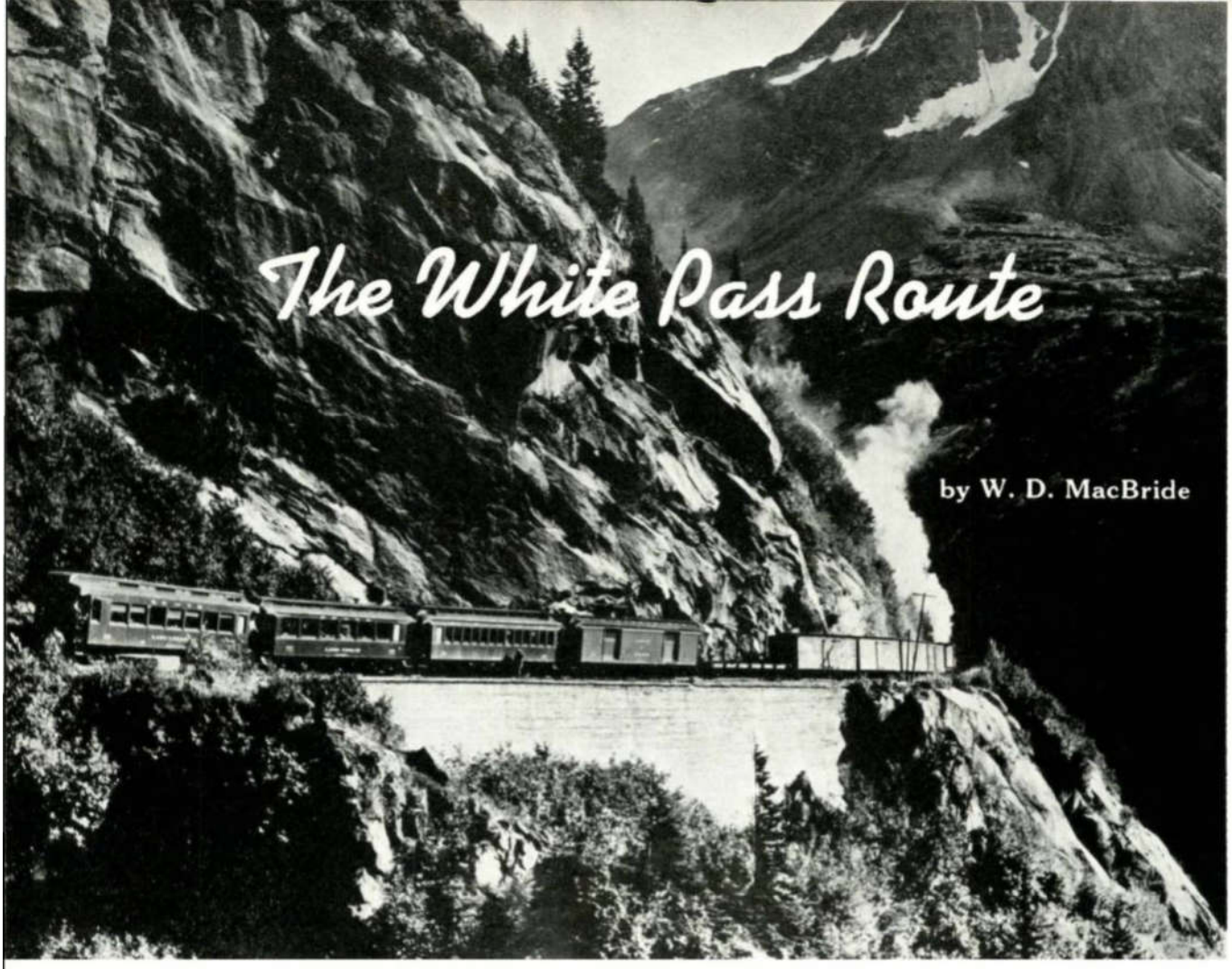
There were great romances such as John Rowand's. Rowand, in charge for the Hudson's Bay Company at Fort Edmonton, went buffalo hunting one day, and didn't return at the expected hour. The other white traders weren't alarmed. But a young Indian girl was. She mounted her pony, rode off across the prairie to where the herd would likely be, and found the Irish factor on the ground. He had been thrown by his horse. The girl saved his life, according to Sir Henry Lefroy; probably she splinted his broken leg with whatever she could contrive, thus preventing the break from becoming a compound fracture. Rowand recovered, though he had a limp for life, and his rescuer became first lady of the vast Saskatchewan empire.

Gradually the Montreal traders prospered, many acquired estates along the St. Lawrence or Ottawa Rivers and faced complications on account of their Indian "marriages." Nor'Wester William Connolly was one of these. He had left his Indian wife, Susanne Pas-de-nom, and their six children behind when he married Julia Woolrich, daughter of a wealthy Montreal merchant. Later, when a convent was established at the Red River, he maintained Susanne there, and after his death Julia continued to provide for her. But Connolly left a large estate. His eldest halfbreed son sued for a share. The courts ruled that the Indian marriage was valid. An appeal went to the Judicial Committee of the Privy Council. But the case was settled out of court, and the right of children by an "Indian marriage" established. In the meantime, one of Susanne's daughters, Amelia, became wife to James, later Sir James, Douglas, first governor of British Columbia.

Sir George Simpson ruled that every man must provide for his own women, as well as for his "bits of brown." Most of the white traders cared for their native spouses willingly. The women had made homes where white women couldn't have survived. They had their babies easily and were able to continue their normal duties shortly afterwards. Most, having mothered the earliest settlements in the northwest together with the numerous social and political problems arising from mixed blood, ended their days at the post where they had lived with their various white husbands.

Problems, however, increased with their daughters, girls who inherited the conflicting characteristics of generations of civilized living and many nomadic tendencies. In time, white traders and clerks married them rather than full-blooded Indians. Even Sir George Simpson maintained a "country wife" at York Factory. When the governor and his friend John George McTavish decided to return to Scotland to marry white wives, they found that the half-breed women had learned something of women's rights. Sir George as governor could readily command a subordinate to take his discarded wife, but McTavish had trouble with his Nancy. Indeed so spirited a woman was Nancy that McTavish decided he must leave without announcing his real intentions to her. He actually went off to England on the boat, leaving his affairs as though he would be back in the spring. Next spring "madame" and their children went often to the shore to look for the boat that would bring back her man. She was heart-broken when she heard what had happened. McTavish provided for her, happy in his own new good fortune—"I owe it all to Geordie!" But that didn't cure Nancy's broken heart.

Today the Indian women who played so large a role in the lives of our pioneers are almost forgotten. Here and there a Canadian family of several generations is sufficiently removed from the false embarrassment of a strain of Indian blood to admit that an ancestor in the fur trade did take an Indian wife. But whether those concerned view their ancestry with pride or embarrassment, we must duly acknowledge the role of aboriginal women in the exploration of our country. ◆



The White Pass Route

by W. D. MacBride

A mixed passenger and freight train winds through the White Pass on its way from Alaska to the Yukon.

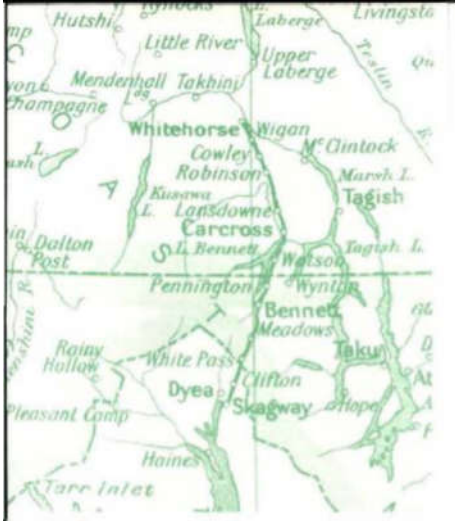
The White Pass Railway from Skagway to Whitehorse has a picturesque past and present.

THERE is only one man living in the Yukon today who witnessed the discovery of gold in the Klondike. He is a Tagish Indian named Patsy Henderson. For over twenty years this grand old man has told the tourists, who take the Ben-My-Chree excursion from Carcross, his Yukon story. Patsy, with failing eyes and the strain of his years, won't be with us much longer, so in brief here is Patsy's story, which has been recorded by the Canadian Broadcasting Corporation:

"This is Klondike story. Dawson Charlie he find gold in '96, 17th August. He is my brother and his pardner Skookum Jim my Uncle. Another pardner George Carmack, he is a white man—four of us—now all these people die except me. The time we find gold in the Klondike I'm just a kid—old man now. George Carmack come from outside Chilkoot Pass. He marry Skookum Jim's sister, Kate, my aunt. George get tired around here, so he go down river with his wife. They take small boat. He don't come back two years so we go down river look for George. We find him on Trondiuck River, that's Indian name for 'Hammer Creek.' Those days Indian hammer stakes across creek, hold nets, catch big King Salmon come up Yukon river. Pretty soon white man call this creek 'Klondike River.' George Carmack camp on creek run into this river. That creek, no name—pretty soon be 'Bonanza Creek.' Skookum Jim go down creek for drink of water. He see gold. He call, 'George, come down here, bring shovel and gold pan, we try here.' In twenty minutes George pan $5 coarse gold. George say 'I think we have good place. I am staking claims.' Staked claims for three people, George Carmack, Skookum Jim and Tagish Charlie. They give name to creek, 'Bonanza,' first good creek in Klondike. Me, I'm too young to stake. When I see gold first time I no savvy; I never see gold before. They go down to Forty Mile and record claims."

Time passed and the word of the gold strike eventually reached the great "Outside." In June, 1897, the S.S. *Excelsior* arrived in San Francisco and the S.S. *Humboldt* reached San Diego, each with about $750,000 in gold aboard. The S.S. *Portland* docked at Seattle on July 17,

W. D. MacBride is president of the Yukon Historical Society.



Route of the White Pass and Yukon Railway from tidewater to Whitehorse.

carrying miners whose combined fortunes equalled one ton of gold.

Then the wild stories about gold at the grass roots spread all over the world. Farmers sold their ranches; clerks and teachers left their jobs; members of the underworld rushed for a new Eldorado. The Klondike gold rush was in full swing.

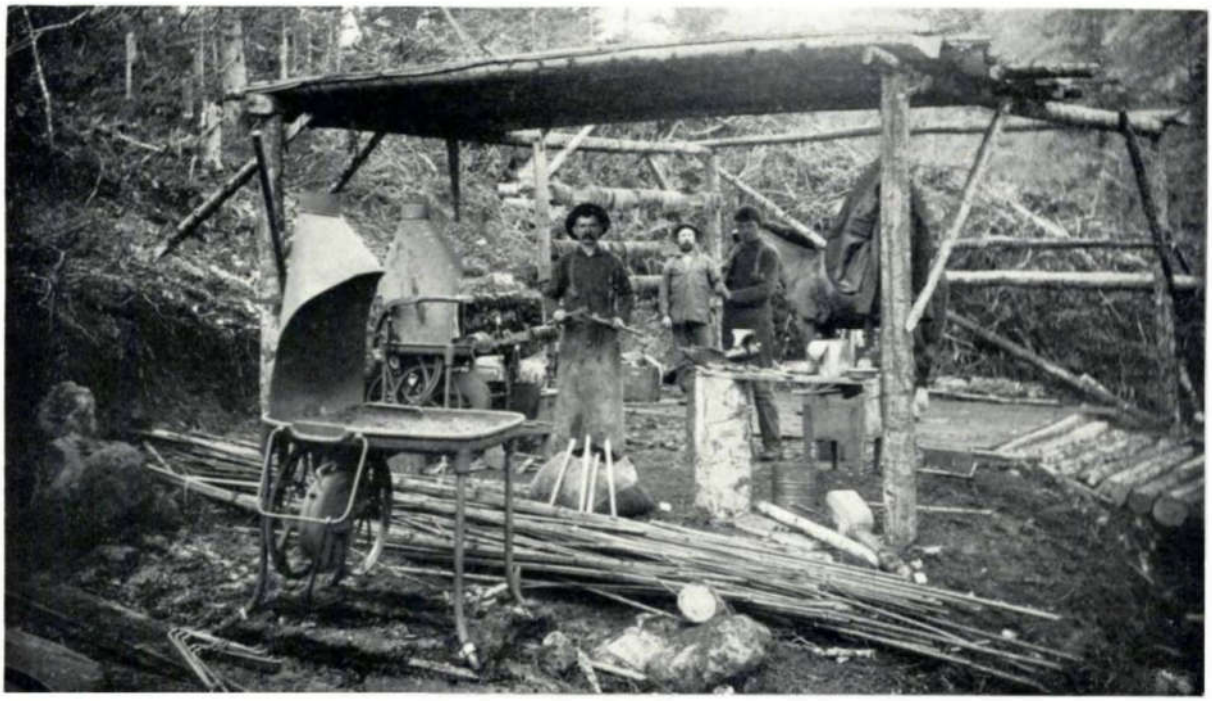
In 1897 an order-in-council of the Canadian Government authorized MacKenzie & Mann of Toronto to build a railroad from Telegraph Creek, head of navigation on the Stikine River of British Columbia, to the head of Teslin Lake, about 150 miles. Teslin Lake, about 85 miles in length, stretches through British Columbia into the Yukon. Four hundred men were conveyed to Telegraph Creek to start this project; but the life of this route was a short and merry one, ending abruptly when the Canadian Parliament refused to ratify the agreement. A certain amount of work was done by the contractors in the way of clearing right of way and building corduroy roads on the Teslin trail. Many of the employees of MacKenzie & Mann found their way to Skagway and worked on the construction of the White Pass Railroad.

In the early spring of 1898, Michael J. Heney, a young Irish Canadian of much experience in railroad construction had perceived the necessity of a railroad from the Pacific Ocean to the headwaters of the Yukon River. Alone and unaided he had made a cursory survey of the terrain from Skagway, Alaska to Lake Bennett in British Columbia. In the St. James Hotel in Skagway, Heney attracted the attention of three men who were in Skagway on a similar mission, on which they had practically decided to make an adverse report. These men were Sir Thomas Tancrede, an engineer representing Close Brothers of London, England; Samuel H. Graves, their U.S. representative, and E. C. Hawkins, an American engineer. Heney had the vision, the faith and the enthusiasm. The other men could and did produce the money, so the White Pass and Yukon Route was created, with Graves the first president of the new company, Heney the contractor, and Hawkins chief construction engineer.

On May 27, 1898, men, horses and material were landed at Skagway and the following morning the ribbons of steel were pointing north through the White Pass. On July 21, 1898, the first train was operated for a distance of four miles out of Skagway. This was quite an historic event as it was the first railroad train carrying passengers ever operated in Alaska or so far north anywhere on the American continent.

The railroad reached the summit of White Pass on February 18, and the head of Lake Bennett on July 6, 1899.

Portable blacksmith shop used in building the railway. *H. C. Barley*



Ceremony of driving the last spike at Whitehorse, June 8, 1900. Bill Robinson is the man with the white forehead, facing the camera. On his left is an engineer named Hislop, and next to him, M. J. Heney. *H. C. Barley*

The construction of the railroad between Caribou Crossing (now known as Carcross) and Whitehorse was completed on June 8, 1900, and the Bennett to Carcross section received the golden spike on July 29, 1900, thus opening the road for through traffic.

The building of the White Pass Railway was attended by more than ordinary difficulties. It was a thousand miles from supply bases and there were no telegraph or telephone lines connecting this area with the States. Steamer sailings were irregular. On August 8, 1899, 1500 employees during that day and the ensuing few days, grabbed their picks and shovels and started off pellmell on a gold stampede to Atlin, B.C. Thus only a few hundred men were left on the job and it was necessary at once to begin filling their places. It was also necessary to break in the men who did fill the vacancies and to wait for a new supply of picks and shovels.

Nearly all the work between Skagway and Summit was in solid rock. Immense quantities of dynamite and blasting powder were used. In one case a rock cliff 120 feet high, 70 feet wide, and 20 feet thick was blasted away. Sometimes the mountain sides were so steep that men had to be suspended by ropes to prevent their falling off while cutting the grade. A short distance from the Summit a deep V-shaped canyon is spanned by a steel cantilever bridge 215 feet in height, the most northerly bridge of its type and height in the world.

Sixteen miles from Skagway is found the first and only tunnel on the line. This tunnel is only 250 feet in length, but probably no tunnel in history was ever built under greater difficulties. Supplies and machinery had to be hoisted up the steepest trail imaginable.

At Lewes Lake, 81 miles from Skagway, a location had been made along the east shore, but the shore line was so indented with coves that in order to obtain a better line it was decided to lower the surface of the water about fourteen feet. This was done by excavating an outlet channel. However, the unforeseen happened. The water, after remaining stationary for some time, cut its way through the sandy outlet, forming an enormous canyon through the lake bed. This reduced the lake level over seventy feet, and left a dozen small lakes separated from the main body. In many of these potholes lake trout still exist.

All told there were 35,000 men at work on the line, from say, June 1st, 1898, to October 1st, 1900, and of this number there were only thirty-five deaths from all causes including sickness as well as accidents. A very intelligent class of workmen was employed. Many of them were men anxious to reach the gold fields but awaiting the opening of water transport Others who worked through the summer months had exhausted their funds and wished to replenish them, so they could continue prospecting. No Asiatic labour was employed on the railroad.

The White Pass Railway is narrow-gauge, 36 inches between rails. From sea level it ascends to a height of 2,885 feet in twenty miles, but its highest elevation is reached at Log Cabin, a station at milepost 33, altitude 2,916 feet. The average grade from the docks to the

An old sleigh and wagon are kept on view in the station yard at Whitehorse. *R. Gilliat*

summit is 2.6 percent and the steepest grade about 4 percent. The maximum curvature is 16 degrees.

The cost of the road from Skagway to the summit of White Pass was over $100,000 per mile. From that point to Whitehorse, while the cost per mile was less, it was still much in excess of similar construction in the United States. The line is 110.7 miles long; 20.4 miles in Alaska; 32.2 miles in British Columbia, and 58.1 miles in the Yukon Territory.

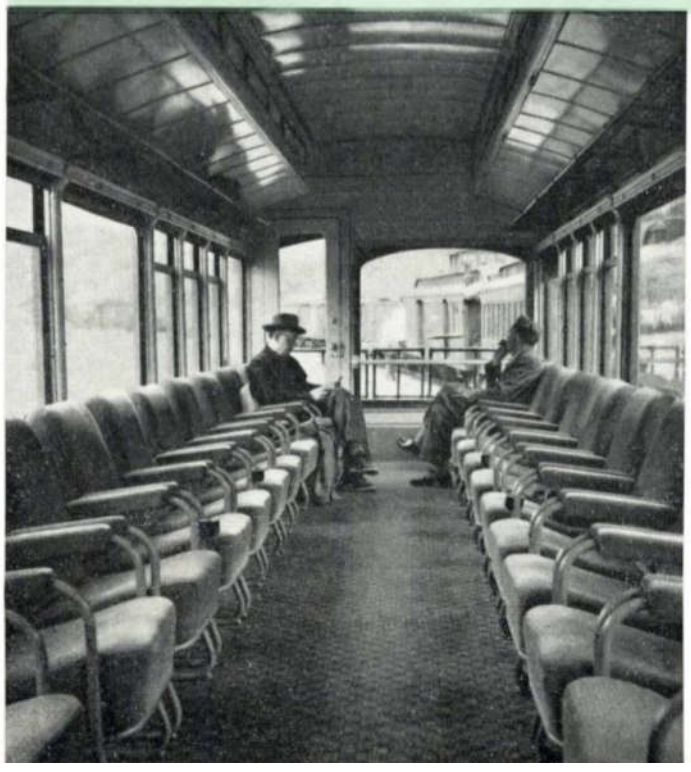
All big projects have their heroes or romantic characters, and the White Pass were fortunate in securing the services of William C. Robinson, who became their "Master of Transportation."

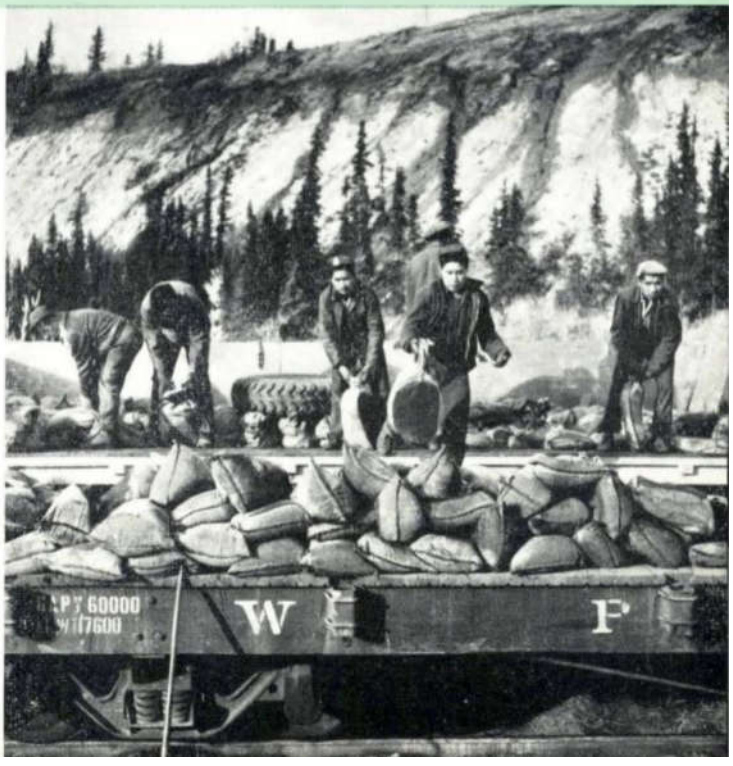
Bill came from the state of Maine and went up the Stikine River with the MacKenzie & Mann outfit in 1897. When they faded out, Bill landed in Skagway and joined the forces of the White Pass & Yukon Route. He was popularly known as "Stikine" Bill. He was a very tall and hefty man, and he could be rough and tough or gentle and kind as the occasion demanded. Bill became the trouble-shooter for the railway and tackled any problems that came his way, solved them in his own inimitable manner, came up smiling and asked for more.

At milepost 89 on the railway there is a faded sign post bearing the name *Robinson*. This little flag stop is the gateway to the Yukon mining areas of the Wheaton and Watson rivers, which any day may become prominent in mining circles. From all the names of famous personalities of construction days, his is the only one thus perpetuated. (One of Bill's big construction camps was at Robinson.)

In the spring of 1899 Heney organized a horse-drawn freight service between the summit of the White Pass and the head of Lake Bennett, and this service was extended during the winter months to Carcross at the foot of Lake Bennett. Bill Robinson was the general manager of the "Red Line" and it forwarded a large number of passengers and hundreds of tons of freight, including material, engines and boilers, etc. for a number of steamers built at the head of Lake Bennett that spring.

When the rails reached the head of Lake Bennett some method had to be devised to carry an immense quantity of rails, ties, stores, construction plants and rolling stock down Lake Bennett to Carcross. For this purpose the "Torpedo Catcher" was designed and built at Lake Bennett. It was a big barge with a capacity of about 150 tons of freight. All cargo was carried on its deck for con-





Rolling stock on the White Pass Railway. Lower left, an observation car. Lower right, loading bags of silver lead concentrate from a truck onto a flat car for Skagway, from where it is shipped south to Trail, B.C. *R. Gilliat*

venience in loading and unloading. In shape it was a flat oblong box with sloping ends, which, projecting over the shore landings, facilitated freight handling. Bill Robinson was in charge of the building and operation of this vessel.

When it was finished Bill walked around it and inspected both ends carefully. Finally he said "I think we'll make this end the stern." Whereupon the word *Stern* was chalked in large letters on one end.

The next move was to install upright boilers with engines attached to three propellors. On a short trial trip this craft travelled so fast, it was named the *Torpedo Catcher*. Finally Bill's flagship was ready and loaded for its maiden voyage down Lake Bennett. In the pilot house was Stikine Bill. He blew his starboard whistle, jingled the engine room bells, and backed out from the Bennett wharf. With all three propellors working, Bill wanted to show the crowd assembled on the bank, how he could turn the "TC" in its own length. He did, but it kept on turning and turning until the watchers on the bank struck up a popular tune of the day, "Waltz me around again, Willie."

Bill finally got his steamship straightened out and chugged down the lake to Carcross.

Stikine Bill joined Heney and Hawkins and many of the old White Pass staff, to build the 131-mile Copper River and Northwestern Railroad from Cordova to Chitina, Alaska, and a 65-mile branch from Chitina to the famous Kennicott copper mine. Eventually he returned to North Anson, Maine, where he purchased an apple orchard, and where he lived until his death on September 29th, 1926.

Michael J. Heney, again the contractor for the Copper River and Northwestern, was in the wreck of the *Ohio* on the Alaska Coast in 1910, and was rescued from the icy waters of the North Pacific, from which hardship he never recovered. He passed away in San Francisco, in 1910.

Heney was known by his loyal host of workers as the "Irish Prince." He was one of those old time contractors who hitched his wagon to a star—the fulfilment of his contract. Come Hell or high water he pushed his railway's tortuous path through the wilderness by every adroit means. He was fair and just to his men, like Stikine Bill, tough but kind, and the men broke their backs for him, on the pick and shovel jobs.

Space permits a mere mention of the famous character known as Soapy Smith insofar as he affected the operations of railway construction. In brief, Jefferson Randolph Smith was the leader of an organized gang of 300 men in Skagway, Alaska, which included most of the crooks of the west. This infamous organization was known as "The Law and Order Society" and it lived out its short term because its leader was in cahoots with an official at Skagway and did not molest the permanent residents. They preyed upon the miners returning from the Klondike and upon the newcomers arriving from the ocean steamers. When Samuel H. Graves, first president of the White Pass, arrived in Skagway on his second trip, July 2nd, 1898, he declined a courteous invitation from "Soapy" to head the Fourth of July parade with him. On July 6th "Soapy's" men robbed a young miner of $3,000 in gold. Citizens called a meeting and organized a "Merchant's Committee" (vigilante) making Mr. Graves the chairman.

They gave "Soapy" 24 hours to return the gold and he did not comply. On July 8th "Soapy" Smith was dead and the local jails were jammed with his men. On that day Smith attempted to crash a meeting of the "Committee" on the Skagway dock, but ran afoul of their guard, Frank H. Reid. Both men shot at the same moment. Smith fell dead and Reid was mortally wounded.

The interference of the Soapy Smith gang with railroad construction was mostly of the nuisance type, such as starting shell games along the trail, and attempts to operate liquor and gambling dives near the camps. M. J. Heney had one strict and simple rule, "No Liquor Allowed in Camp." One of "Soapy's" men set up such a tent "dive" near Camp 3, Rocky Point. Heney ordered him off. He refused, stating he had as good a right as Heney to be there, which perhaps he did. However, Heney was never a man to split straws over technical rights. He sent for Foy, the camp foreman, and pointing to a big overhanging cliff just above the drinking den, told Foy in the hearing of the owner, "That rock has got to be out of there by five tomorrow morning—not a minute later, mind."

Early next morning Foy sent a rock gang to place a few sticks of dynamite in the rock cliff. They reported all ready at ten minutes to five. At five minutes to five Foy sent a man to the tent to rouse its occupant. He refused, with picturesque language, to get up so early. Then Foy went himself and said: "In one minute by this watch I will give the order to touch off the time fuse. It will burn for one minute and then that rock will arrive here or hereabouts." The man in bed told Foy where to go. Foy replied, "I'm too busy to go this morning but *you* will unless you jump lively—FIRE!" Foy used the remaining sixty seconds to retire behind a projecting cliff, where he was joined in ten seconds by the tent owner in his underwear, and together they witnessed the blast and the demolition of tent and liquor stock. Foy then reported to Heney, "That rock is down, sir."

"Where is the man?" asked Heney.

"The last I saw of him he was high-tailing down the trail in his underwear, cursing."

The North West Mounted Police were sufficiently alerted by the lack of law and order in Skagway to post a Maxim Nordenfeldt machine gun at the heads of both Chilcoot and White Passes, but they were never used. One of these guns reposes in the museum of the Yukon Historical Society at Whitehorse.

Statistics are seldom interesting so they will be confined to a few essentials. The railway has passed through years of heavy traffic and years of depression. Movement of freight has always been the main source of revenue, augmented by heavy tourist travel in the summer months. In the peak passenger year of 1927, the railroad carried 22,667 passengers. Daily trains are operated during the summer and most days in the winter.

In the early months of 1942 plans for the building of the Alaska Highway were under way. An agreement was

All that is left of the Skagway wharf where so many thousands of gold seekers landed in the hope of making their fortunes, and later left for the south. *Rosemary Gilliat*

entered into between the Railway Company and the U.S. Army, whereby the Army would take over the operation of the railway from Oct. 1, 1942 to April 30th, 1946, using the railway's existing personnel and equipment but augmenting them with U.S. troops and additional equipment gathered from all the narrow gauge railways in America. At one time during this period 1600 U.S. Army personnel were working on the railroad.

From January 1st, 1942 to April 30, 1946, a total of 564,446 tons was handled, which included commercial freight and Army supplies and equipment. The peak month was August, 1943, when a total of 47,506 tons was moved. In one day a record movement of 2,085 tons was attained.

Through the years, from the passenger standpoint, this railway has enjoyed a wonderful reputation. The 67 miles between Skagway and Carcross has been acclaimed the most scenic in America.

The White Pass & Yukon Route is now a Canadian company, known as The White Pass and Yukon Corporation, Limited. Its directors are prominent and successful business men of Canada, and they are working on a definite progressive plan of modernization of the railroad. New diesel engines are under construction; new ties and rails are being installed; buildings, and equipment are being renewed and modernized.

Immense bodies of ore in the Yukon and northern British Columbia are being investigated; gold, lead, zinc, nickel, cobalt, asbestos, copper, tungsten and antimony, to mention a few. Tremendous hydro developments are in the offing. The future of the Yukon is a bright one and the railroad will assist this march of progress in every way.•

Dr. Bell with his party on the shore of the Athabasca River. *J. W Mills*

The Father of Place Names

by Douglas Leechman

Photos by Robert Bell

Dr. Robert Bell of the Geological Survey of Canada, who knew the North as few men knew it, was one of the most accomplished Canadians of his time.

WHEN Kipling sang of famous men who yet were men of little showing, but whose work continueth great beyond their knowing; and when, in the same poem, he sang of servants of the staff and chain beneath the further stars, one almost wonders if he had met Robert Bell. Probably not, almost certainly not, but he assuredly knew of others much like him, other men whose work continueth, great beyond their knowing.

Hardly remembered now except by those few of his colleagues who are still living, Bell was very well known in his day. Until the era of the aeroplane, it was quite possible that Bell had travelled more and seen more of this country than anyone else, living or dead. For fifty-two years, from the age of fifteen till his final retirement in 1908 at the age of sixty-seven, he spent every summer in field work, much of the time in areas almost unexplored, some of them totally unknown.

A summary of his expeditions would be merely a tedious list of place-names, conveying but little idea of what he actually accomplished. His field note-book must have been constantly in his hand, to be filled with detailed notes of the route he followed, the rock outcrops, records of animals, plants, and minerals collected, the topography, the weather, the Indians, agricultural possibilities, systems of transportation, and everything else of significance and importance to a man of unusually broad interests.

Robert Bell was born on June 3rd, 1841, near what is now Toronto. Both his grandfather and his father were ministers of the Scotch Presbyterian church and, more pertinent still, both of them were keen field-naturalists. Rev. Andrew Bell, young Robert's father, made an important collection of rocks and fossils from the lower Ottawa River, and much of his material is still treasured in the study collections at Queen's University in Kingston. When William Logan (later Sir William) organized the Geological Survey of Canada in 1842, the year after Robert's birth, Rev. Andrew Bell was one of the men he consulted in planning the series of field investigations that

Dr. Leechman, who himself has travelled widely in the North, is senior archaeologist at the National Museum in Ottawa.

Hauling a York boat over the Robinson Portage between Norway House and York Factory, in 1878

were to lead eventually to a study of the geology of the whole of Canada, a subject about which, at that time, almost nothing was known.

Robert Bell spent much time on outings with his father, collecting specimens, studying fresh-water algae, and familiarizing himself with the geology of the area about his home. So keen was he, and so industrious, that he attracted Logan's attention, who sent him out as an assistant to James Richardson on a summer field trip along the Gaspé. Bell, at this time, was only fifteen, surely one of the youngest students ever to be sent into the field.

In December of that same year (1856) Bell was appointed junior assistant to Logan on the staff of the Geological Survey, and he remained a member of the Survey, except for one short interlude, till his retirement. In 1857 and 1858 he again spent the summer with Richardson, along the south shore of the St. Lawrence, and the records show that, in addition to his normal duties which were enough to keep him reasonably busy, he collected or recorded 22 mammals, 55 birds, 4 reptiles, 31 fishes, 95 insects, 9 crustaceans, 7 worms, 149 shell fish, 15 other invertebrates, and 135 plants, a total of 522 different species. Some biologists would consider that a good summer's work alone.

The following year, when barely eighteen, he took out his own field party and worked along the north shore of Lake Huron and on Manitoulin Island, an area in which he was subsequently to spend a good many summers. At that time, roads were non-existent on Manitoulin, in fact the island had not yet been surveyed.

Busy as his summers were, the winters seem to have been even more fully occupied. The headquarters of the Geological Survey were then in Montreal, so Bell was able to attend McGill University after office hours. In 1861 he received a Bachelor's degree in Applied Science and also won the Governor-General's Award. In this year, too, he was made a member of the American Institute of Mining Engineers, the first of a long series of such distinctions and affiliations.

It was also in 1861 that he selected a series of minerals to illustrate Canada's resources at the International Exhibition of 1862 in London, which was attended by over six million visitors. A Grand Prize was awarded to the Canadian Exhibit, and Bell, just twenty-one years old, was elected a Fellow of the Geological Society of London.

In 1863, he took temporary leave of the Survey to accept a position as Interim Professor of Chemistry at Queen's University, a position he held until 1867. During the summers he still did field work for the Survey. In 1866 he was elected a Fellow of the Chemical Society, again a most unusual distinction for so young a man.

Now his field work took him farther from home, into the Lake Superior country, and he began the long series of explorations with a canoe and a couple of native guides that was to continue for many years, during which he investigated practically all the rivers running north through Ontario into Hudson Bay, descending most of them to the mouth and making track surveys of them and of their principal tributaries. Then the prairies claimed him and he spent several summers, he in one buggy and his assistant in another, plodding slowly along, observing and recording, often miles from any trail or homestead.

In 1873 he married Agnes, daughter of Alexander Smith of Westbourne, near Glasgow, Scotland. He was then thirty-two and in receipt of what would today be considered a very meagre salary. In fact, he never was a well-paid man. Like Agassiz, he "had no time to make money." Somehow or other, money just doesn't seem to go along with science. Nevertheless, he brought up three daughters and a son and was able to buy a very comfortable house in Ottawa after the Survey moved there from Montreal.

In 1878 he went down to Philadelphia to show Canadian minerals at the Centennial Exhibition, but did not allow this to conflict with his summer's field work, along the east coast of Hudson Bay, then an almost unknown region. In 1877 he became assistant director of the Survey and, in the following year, again proved that he had spent

his winters to advantage, for he was given degrees in medicine and surgery by McGill. For years he had realized how useful a knowledge of the physician's art might be in the field, for he had often met cases in which he could have helped had he but had the skill. Now he was a fully qualified Member of the College of Physicians and Surgeons of Lower Canada and, from then on, he invariably carried drugs and instruments with him on his expeditions.

The big move from Montreal to Ottawa came in 1880, and the Survey and Museum were installed in a large stone building on Sussex Street, built in 1874, where they were to stay for thirty years. At the end of that summer's field work, Bell sailed on the Hudson's Bay barque *Ocean Nymph* from York Factory to London, a long and stormy voyage, according to family tradition, of thirteen weeks. It was, presumably, during the ensuing winter that Bell attended lectures at Edinburgh University and listened to such famous men as Lords Kelvin and Lister.

In 1882, the Marquis of Lorne selected Bell as one of the Foundation Fellows of the newly formed Royal Society of Canada. That summer he worked on the tar sands of the Athabasca, a geological phenomenon that held his interest and attention for many years. By now, he was well-known in his branch of science. Honours were bestowed on him in almost bewildering succession. In 1883 he was elected to membership in the American Institute of Mining and Metallurgy, and Queen's University made him an Honorary Doctor of Laws. The following year, after having been elected to honorary membership in the Medico-Chirurgical Society of Montreal, he sailed for the Arctic with Commander Gordon of the *Neptune*, doubling as zoologist and botanist, in addition to his work in geology. This expedition explored parts of Hudson Bay, a task that was continued by Bell in 1885 with another expedition on the *Alert*. This time, having reached the bottom of the Bay, he elected to return to Ottawa by way of the Severn River.

Bell traversed Hudson Strait nine times altogether, and his observations there and in Hudson Bay led him to a firm conviction that a shipping port was needed somewhere on the west side, at York Factory perhaps, or at the mouth of the Churchill River. This route to the Old World, he pointed out, was shorter and less expensive than that down the St. Lawrence, and the rail haul across the prairies would be shorter too. For years he urged the building of a railway to the Bay, and he was strong in his advocacy of the plan which was ultimately adopted.

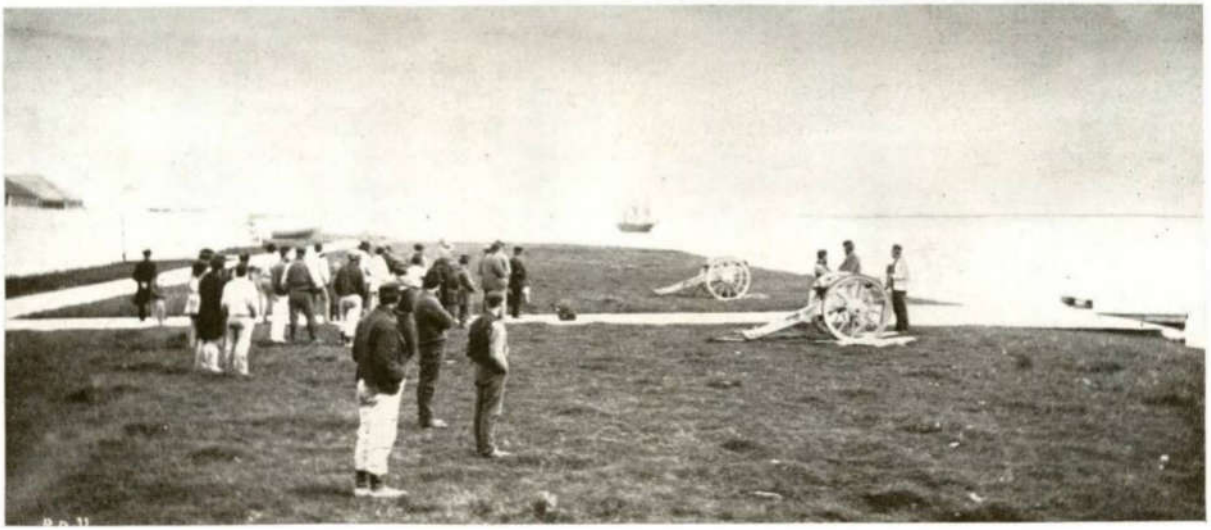
His field work continued summer after summer. The Ottawa Medico-Chirurgical Society elected him to membership, he served on a Royal Commission on the mineral resources of Ontario, he was elected to the Geographical Society of America (1889), and in 1893 went to the World's Columbian Exposition (usually known as the Chicago World's Fair) with a collection of Canadian minerals.

In his many years of field work, Bell gave names to over three thousand topographical features—more than any other explorer in Canada—and most of them, nearly all in fact, are still in use. Other officers of the Survey used to call Bell "the father of all place names." It take a man with a full mind to think of three thousand different and appropriate place-names. He preferred to retain the original Indian name if possible, but many of these were long and difficult of pronunciation. His own name occurs but twice, Bell River in western Quebec and Bell Island in Hudson Bay, both named in his honour by others.

In 1897 he was elected a Fellow of the Royal Society of London, the highest scientific distinction perhaps, in the English-speaking world. That summer he started off for the Arctic again in the *Diana* expedition. They worked along the south shore of Baffin Island and Bell went inland to the great lakes of the southern interior.

Two years later, he explored Great Slave Lake, at that time seldom visited, but which had attracted attention when prospectors brought out samples of lead, copper, and

As the H B C barque *Ocean Nymph* approaches York Factory in 1880, a gun crew prepares to salute her.



gold. The Hudson's Bay people had long been in there, of course, but their interest was not primarily in geology.

Back once more in Ottawa, administrative duties began to crowd in on him. Dr. George M. Dawson died in 1901 and Bell took over his work as acting director, a status which he retained till 1906. His reputation as an explorer and expert in place-names led to his appointment to the Geographic Board of Canada, and McGill conferred yet further honours on him by awarding him an honorary Doctor of Science degree. In 1903 he went to Vienna where he represented the Royal Society of Canada at an International Geological Congress and, in recognition of his work, he was made a Companion of the Imperial Service Order, and an honorary Doctor of Science by Cambridge University.

In 1906, another flare of awards reached him. He went to London to receive the King's (or Patron's) Gold Medal of the Royal Geographical Society and, an even more singular distinction, was awarded in the same year the Cullum Medal of the American Geographical Society. The only other non-American to receive this award up to that time had been the famous Dr. Livingstone.

This should have seen the end of his official connection with the Geological Survey for he was now sixty-five and the time for retirement had come, but apparently there was still work in that sturdy frame after all. The Survey kept him on the staff as a sort of Geologist Emeritus and he did two more seasons of field work before slipping off his pack for the last time in 1908, the oldest member of the staff of the Civil Service of Canada.

Official records have little to tell us of his pursuits after this. In 1912 he took his family to Paris where their home became a rendezvous for visiting Canadians and artists. The lure of Canada and home proved too strong, however, and 1914 found the Bells back on the range, almost literally, living in a tent on the banks of the Assiniboine River near Rathwell, Manitoba.

Here, on land owned by his wife's family, they built a twenty-by-twenty cabin which is still standing and has since been added to. When the war broke out in August, 1914, they turned to growing wheat and other food crops. On June 18, 1917, after a brief illness, Robert Bell, the father of all place names, died.

His health had always been excellent and it was one of his boasts that, in his seventy-seventh year, he still had all his original thirty-two teeth. He had always taken good care of himself in the field, never smoked, and drank but little on the few social occasions on which he drank at all. "No matter how tired I am," he once said, "I see that I always have a comfortable and dry bed of brush or some substitute every night. I always dry my clothes, or change to dry ones if I can have a change, and do not go without more meals than I can help."

Among the many who mourned his death were the Indians. As soon as word reached the reservation near Rathwell, it is said, the people there lit the first of a series of signal fires that carried the news across the prairies. Years before, he had been made an honorary chief of the Grand Lake Algonquins with the name *Wasagisik*—clear sky—for they had always found him as dependable as a clear sky. After all, he had portaged and camped with them for fifty summers or so, had spoken their language better than most white men ever do, and there were indeed few of them whose father, son, or brother had not known him and always found him dependable, sympathetic, and understanding. Many Indians came to his funeral in Winnipeg, where he was first buried. Later his body was moved to Montreal. There is also a brass tablet to his memory in St. Andrew's Church, Ottawa.

Few men can have lived such a full and satisfying life, and few have been given a virgin half-continent as a workshop and a playground. Ever since his boyhood, natural history had been his chief interest and it maintained its hold on him till the last. He made large collections of

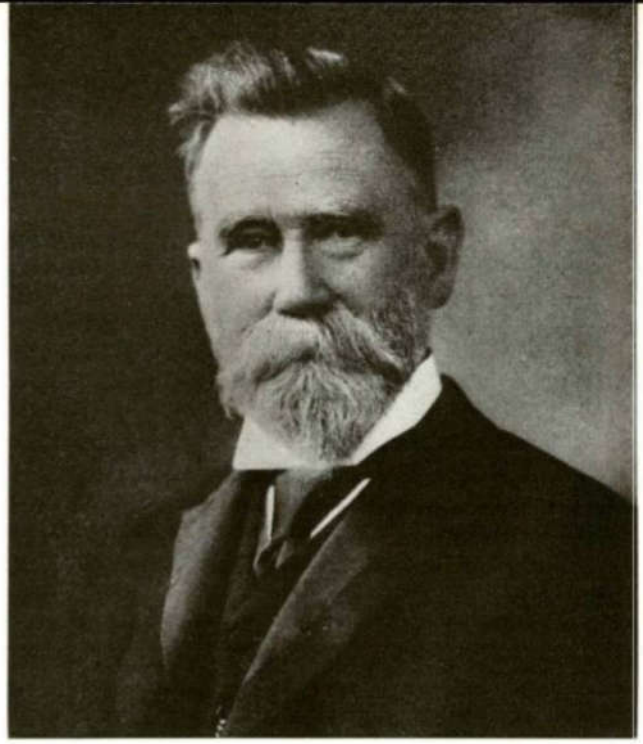
Looking up the Red River from Lower Fort Garry. This is believed to be the only photo extant of the S.S. *Colvile*, first screw steamer on Lake Winnipeg. Note the covered barge.

specimens and recorded hundreds of detailed observations. For long his was the sole specimen of the Scissor-tailed Flycatcher to be taken at York Factory, far north of its usual range, and many new species bear his name. Astronomy, too, claimed his attention and he once lectured to the Royal Astronomical Society in London.

He early predicted the ultimate importance of the Athabasca tar sands, now once more being tested and examined, and it was he who determined the northern limits of various trees. He spent many hours recording these on large scale maps, using little symbols of his own invention to differentiate the species. Photography claimed much of his time in the field and, in the first years, he used the old wet plate method in which a glass plate was bathed in a chemical solution to sensitize it, exposed while still wet, and developed in a portable dark-room tent before it had time to dry. In camp, after the evening meal, he often listened to the folk-tales of the Indians, and in the course of years recorded several hundred of them.

When he was a comparatively young man, his wife accompanied him into the field on occasions and, when she was six months old, his daughter Margaret lived in a moss-bag just like an Indian baby somewhere up around Hudson Bay, a place as remote in those days as Aklavik is now, perhaps more so. He travelled as "light" as possible and lived largely off the country. Once he was on short rations for nine days because a food cache had been wiped out by a forest fire, but normally he tried to foresee and prevent any mishap before it occurred. One of Bell's bugbears was a fear of injury or illness in the field, well equipped though he was to deal with such emergencies.

Of his four children, three still survive. His incredible industry is one of the first characteristics to be mentioned when they speak of him. The third floor of their house on MacLaren Street in Ottawa was a sanctum in which he often worked till two in the morning, filing his notes, labelling his specimens, working endlessly on his tree distribution maps, and writing his numerous reports and articles. These were concerned with such subjects as detailed accounts of the areas he had worked in, natural history observations, the distribution of fossil remains of mammoths and mastodons, ice phenomena in the far north, the tar sands, the commercial importance of Hudson Bay, and the finding of diamonds in the glacial drift of southern Canada. Nearly two hundred papers bear his signature.



Robert Bell, F.R.S., geologist, naturalist, doctor, and chemist.

He was a meticulous precisian and edited the reports of his juniors, never finding one, it seemed, whose English satisfied him. Though he criticised them in this respect, for he was always a bit impatient with stupidity or ignorance, his care for his assistants in the field, whether white or Indian, was proverbial.

Times have changed greatly since 1856, for that's nearly a hundred years ago, when that boy of fifteen—and how proud a boy he must have been—started out on his first summer's field work. No man who follows after him can ever see Canada quite as he saw it. He was certainly one of our men of little showing whose work continueth great beyond their knowing. ◆

Indian camp at Oxford House in 1880.

David Thompson Camped Here

by Winifred A. Weir

A TREE died and was cut down to ensure the safety of those who passed beneath it. The tree had lifted its stately head to gaze across Lake Windermere in the south-east corner of British Columbia long before the white man came to this part of the Columbia River valley.

It marked a page of history by sheltering a campsite for the first white man known to visit the Upper Columbia Valley. It saw civilization lay its hand upon this rugged and beautiful country, and before the tree died and was destroyed its value as an historical site was recognized.

On an autumn day 147 years ago David Thompson landed with his voyageurs in a quiet bay on the shore of what was later called Lake Windermere. Climbing a slight rise under a protective hill they built their camp, kindling a fire at the foot of a tall Douglas fir whose spreading branches afforded shelter.

From the trees close at hand Thompson and his men busied themselves with the erection of a structure to serve as a shelter for themselves and a warehouse for their equipment and supplies. During the construction the campfire at the foot of the tree probably burnt day and night, for autumn nights are chilly in this valley, and in the crisp days there was cooking to be done.

In time the fire burned into the heart of the green tree, leaving a great blackened cavity, one of the first marks of white man's devastation in this country of mountains.

Because the campsite on the lakeshore was vulnerable to attack from hostile Indians, David Thompson moved his men and equipment to another site near Toby Creek to which he had given the more picturesque name of Nelson Rivulet, after the famous British Admiral.

Here, because it was a spot well suited to its purpose and well sheltered from sudden attack, Thompson built Kootenai House, and here he wintered.

The green tree by the lake shore where the fire had been burning was left by the invaders. The gaping wound at its base remained as mute testimony of their visit.

But time heals even the wounds of a tree. Pitch began to drip, and 136 years later it was still dripping, gradually filling up the huge cavity made by the fire of the explorer. But the heart of this great fir was doomed. The tree died about six years ago, and, lest it crash in a storm and endanger life and property, it was marked for destruction.

We know that this fire was actually kindled by men in the party of this great explorer and geographer because in 1942, 135 years after Thompson had reached this spot (described in detail and with characteristic exactitude in his memoirs) another nearby Douglas fir died and was cut down for security reasons. At its base was noted an excessive amount of gum which caused a bystander to observe the tree closely. The cause of the tree's death was revealed.

Many years before, an undercut had been made with a steel bitted axe wielded by a hefty woodsman for the bites were deep. But for some reason or other the tree was not felled, the gum had healed the wound and the sap wood had continued to grow, completely covering the gash.

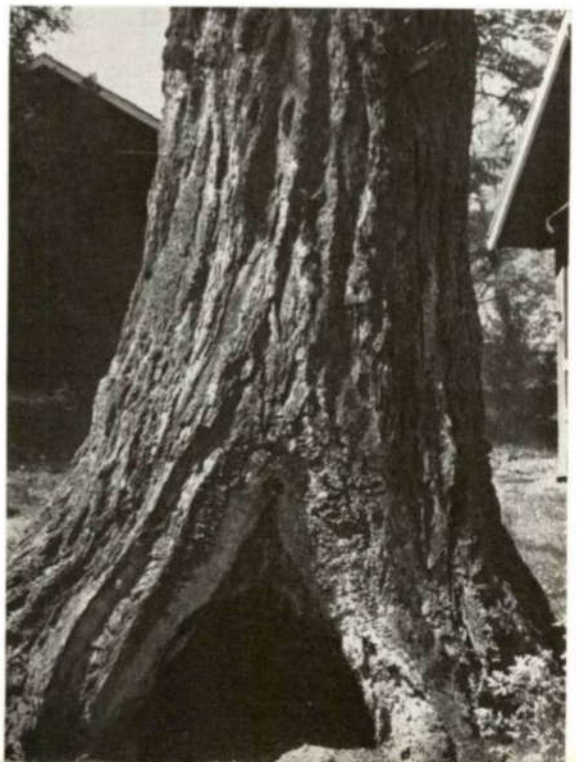
When the tree was felled after its death the earlier wound was apparent, and a check of the annual growth rings proved that the undercut had been made in the year that David Thompson and his party reached that site. We know he camped there because his narrative states his exact position from the mouth of the lake.

O. A. McGuinness of Invermere, who was present at the felling of the tree, carefully preserved the sections containing the undercut. The portion broke into two sections when cut. One section from the heart out bears the original axe marks; the other, the outer shell, carries the impression in wood of those marks. The two sections fit perfectly.

When this interesting fact was revealed, curiosity naturally turned to the nearby tree with the great burned cavity at its base. Careful examination revealed that it, too, had been marked the year of the explorer's visit.

The burned tree stood among green timbers and rustic cottages in a lakeshore summer resort and when doomed had to be cut down for security of life and property. But the stump of the tree with the cavity remains and is marked with a simple plaque explaining its historical significance. ◆

This tree shows the gaping wound made by a campfire lit by one of Thompson's men.



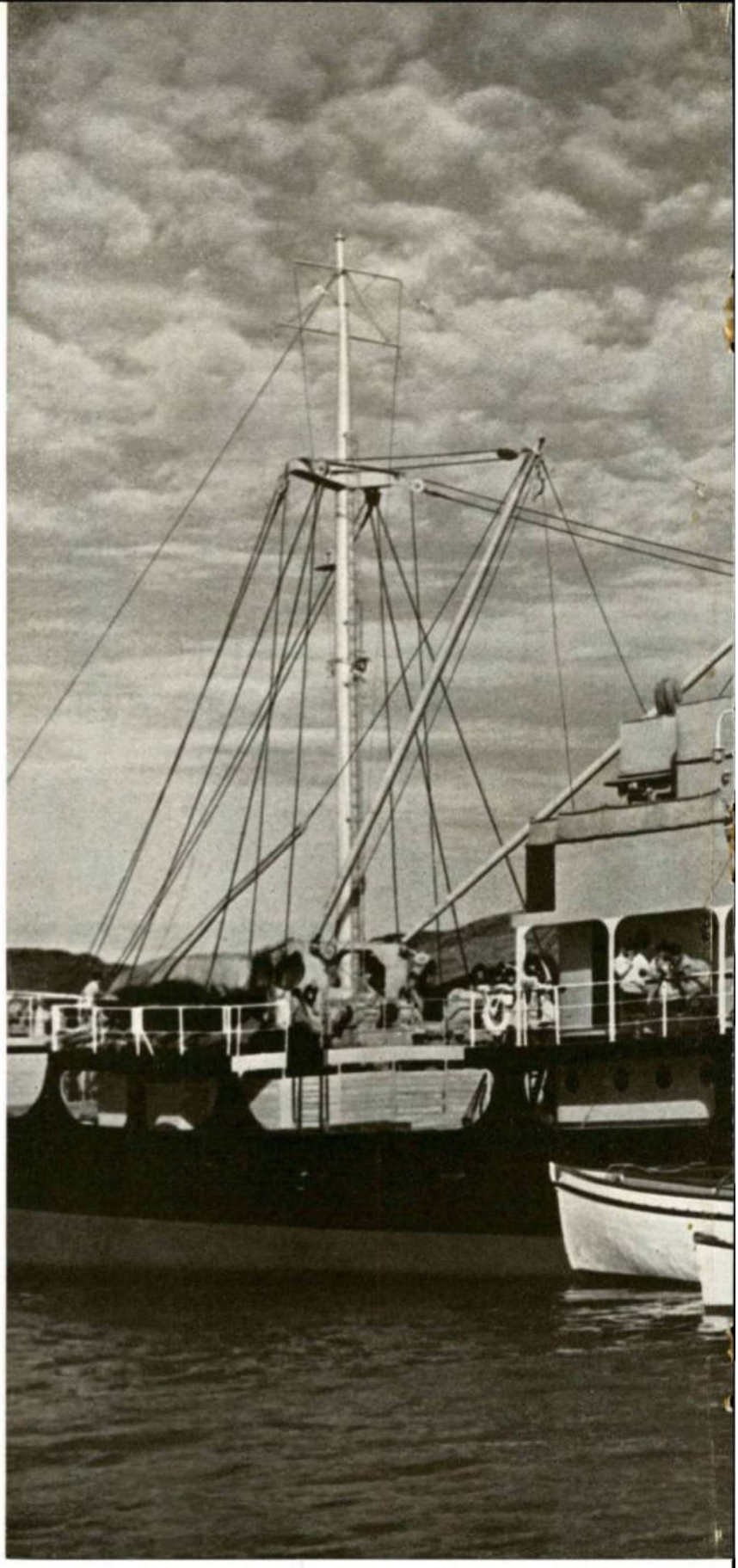
Summer Voyage in Hudson Bay

A group of photographs by

DON BLAIR

LAST year Don Blair, Oklahoma photographer, and his wife—an accomplished portraitist whose *nom de crayon* is Bettina Steinke—went north on the *Rupertsland* to record with camera and pencil the scenes and personalities to be met with on a Hudson Bay voyage. They visited several ports in the Bay and on both sides of Hudson Strait, and were delighted with what they saw. Of the hundreds of shots made by Mr. Blair, some that especially appealed to us are reproduced here.

The *Rupertsland* is a 170-foot diesel-powered vessel, built to replace the famed *Nascopie* as a Company supply ship for the posts in Hudson Bay and Strait. Her accommodation for passengers is generally taken up by Company staff members, and others whose livelihood is in the Arctic.

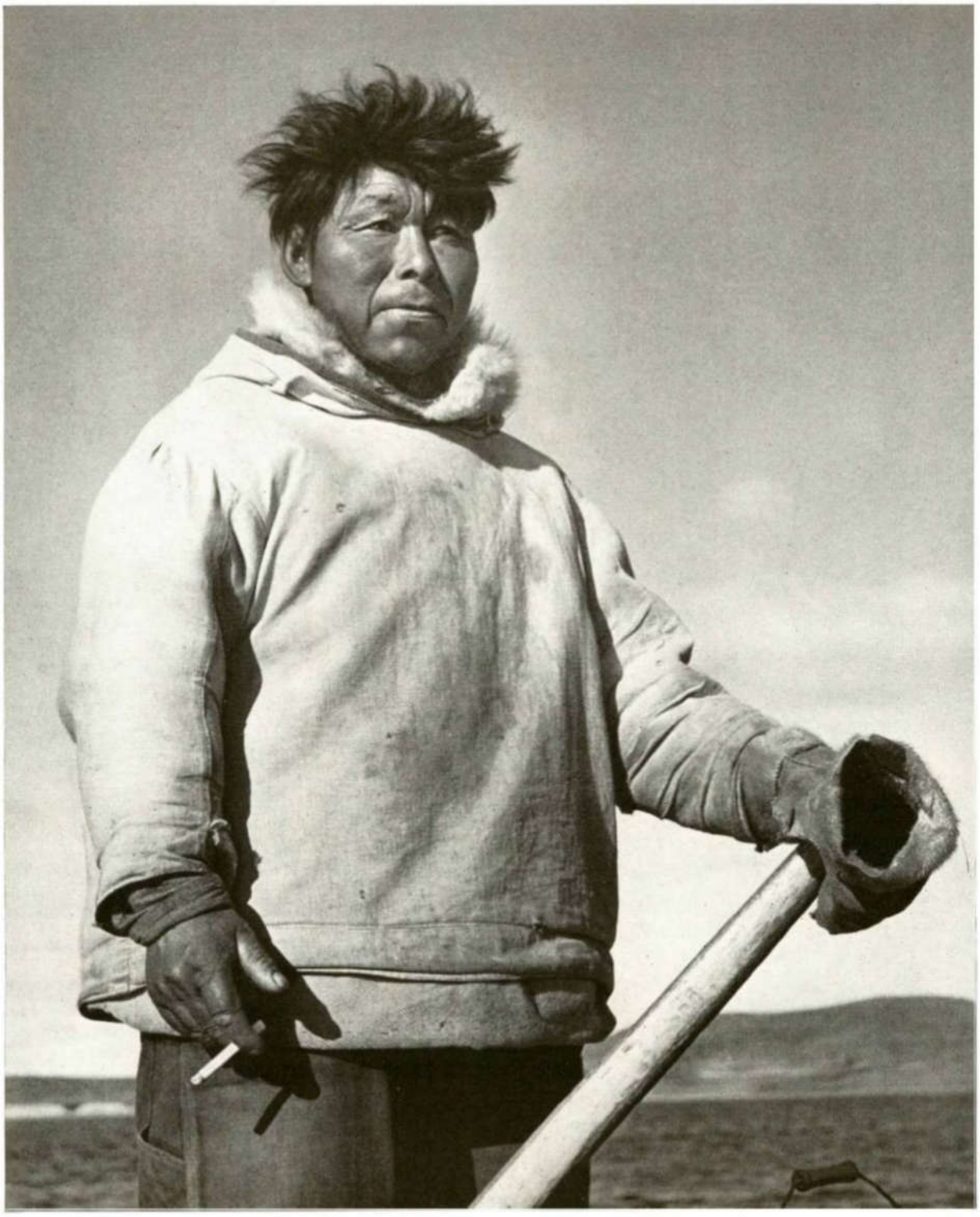


Surrounded by Peterhead boats, the "Rupertsland" lies at anchor, her decks

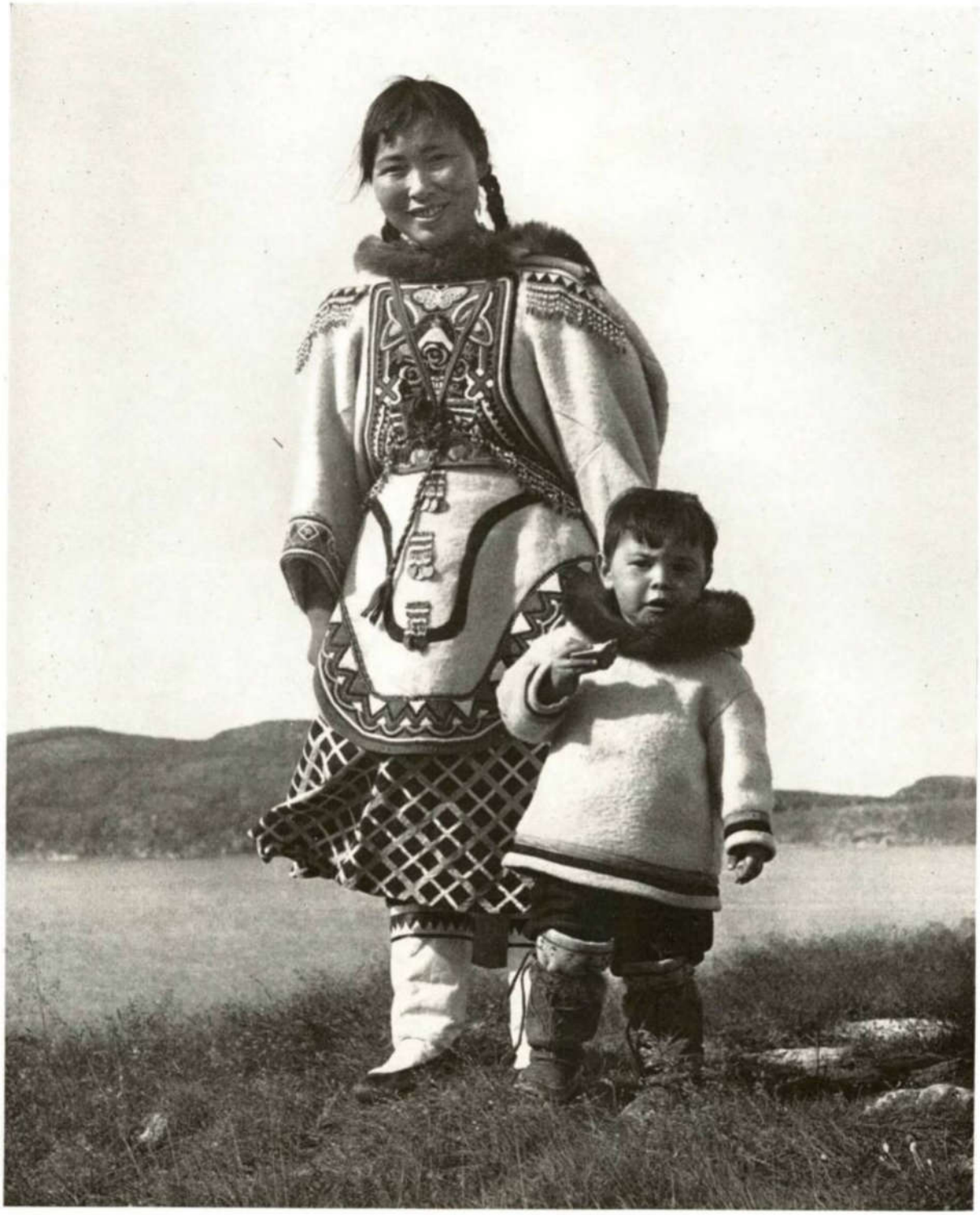
crowded with Eskimo visitors.

At Povungnetuk on the east coast of Hudson Bay, Irvine Gardner, H B C post manager for Sugluk, greets an old friend on the ship.

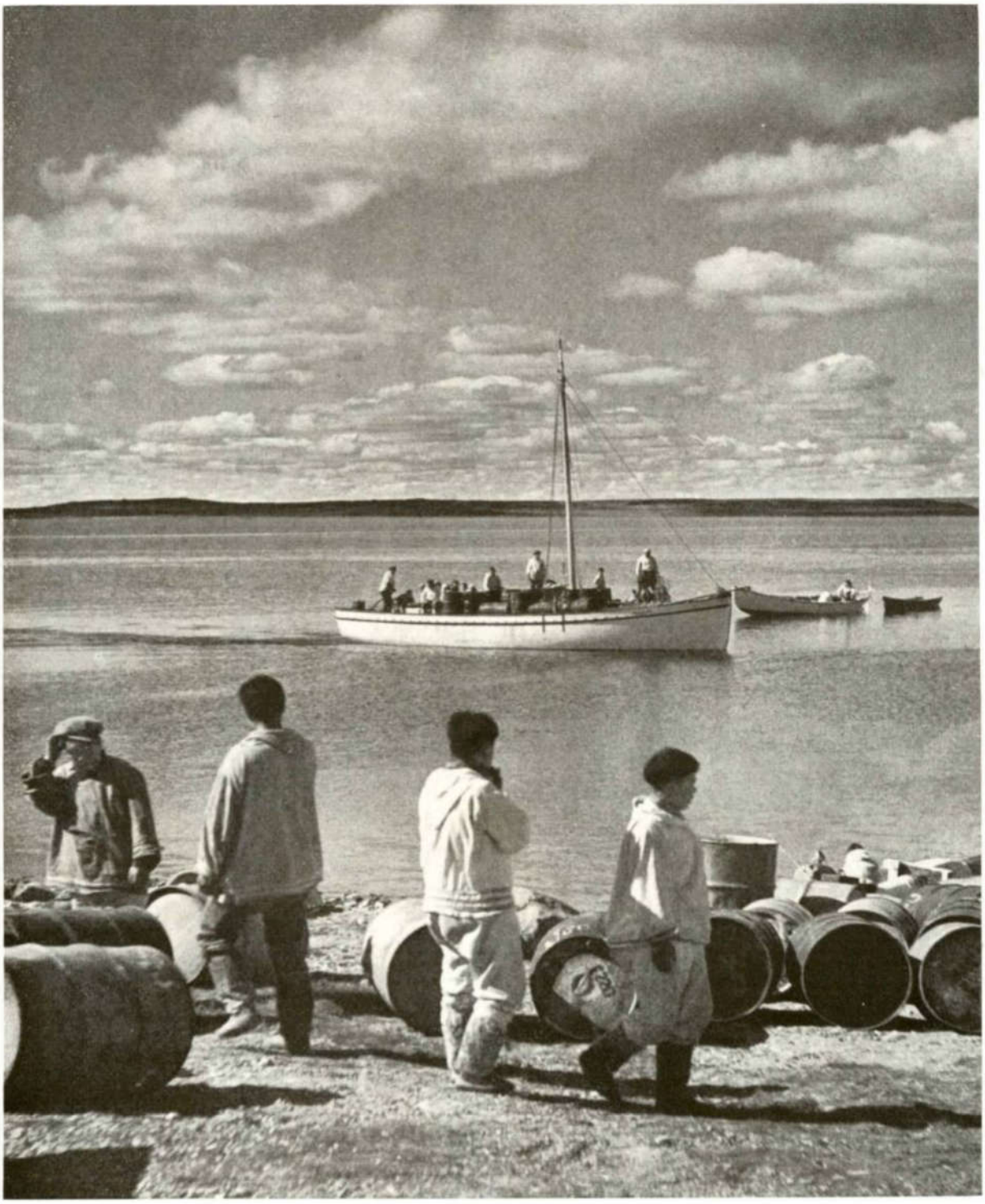
Eskimo stevedores working on the "Rupertsland" at Port Harrison.



At the tiller of his boat, an Eskimo watches for hidden rocks.



This Eskimo mother and child at Cape Dorset also appeared on the cover of the Beaver *two years ago (and in the* American Magazine *this year). Her costume is of duffle, decorated with beads and coins.*



A Peterhead boat brings ashore gasoline and oil from the supply ship.

Coming out on the ship to Churchill are (from left): Tommy Crawford and his family, from H B C Sugluk; Capt. Bob Renny of the Canadian Army at Churchill with his wife and son; Arthur Payne, clerk, and the Ralph Knights, all from H B C Cape Dorset.

Admiral Sir Edward Belcher, R.N., K.C.B. From the "Illustrated London News."

Royal Navy Ships on the Columbia River in 1839

Introduction and Notes
by George M. Douglas

115 years ago Capt. Edward Belcher of later Arctic fame took a naval survey ship up the Columbia to Fort Vancouver

AT the conclusion of the Napoleonic wars, Great Britain had developed a large naval establishment. In an effort to find useful employment for some of the ships and men the Admiralty applied them to peaceful works of great benefit to mankind, which under different conditions might never have been accomplished. The survey of the whole Pacific Ocean from the great ice barrier of the Antarctic to the Arctic shores of North America commands admiration for its practical value and for the comparatively short time of its achievement. Notable among these able explorers and surveyors are Beechey, Belcher, Kellett and Collinson.

Edward Belcher was the descendant of a prominent New England family whose founder emigrated from Essex, England, in 1618. Each generation produced notable men: Edward's great-grandfather was Governor of Massachusetts and New Hampshire, and later of New Jersey, where during his time of office, he became interested in the foundation of Princeton University. His grandfather was the first Chief Justice of Nova Scotia and his father, Andrew, a prominent merchant of Halifax and a member of the Council of Nova Scotia.

Edward Belcher entered the Royal Navy in 1812. After various services in European waters he was appointed assistant surveyor to Captain Beechey of H.M.S. *Blossom* and sailed on a voyage of exploration and survey which lasted for three years, and which covered the Pacific Ocean, the Behring Straits and the shores of North America eastward to Point Barrow. The *Blossom* returned to England in 1828, Belcher was promoted to Commander, and later to Captain on survey vessels in European waters.

In 1835 Beechey took command of the *Sulphur* of 380 tons and *Starling* of 110 tons for further survey and scientific work in the Pacific Ocean. Beechey's health failed him, and in 1836 he was obliged to return to England. Belcher was sent to Panama to assume command of the ships. Kellett, first lieutenant of the *Sulphur*, had been acting commander until Belcher came, and Collinson, Beechey's assistant surveyor, had been first lieutenant in addition to his other duties. On Belcher's arrival Kellett took command of the *Starling*, and Collinson remained first lieutenant on the *Sulphur*.

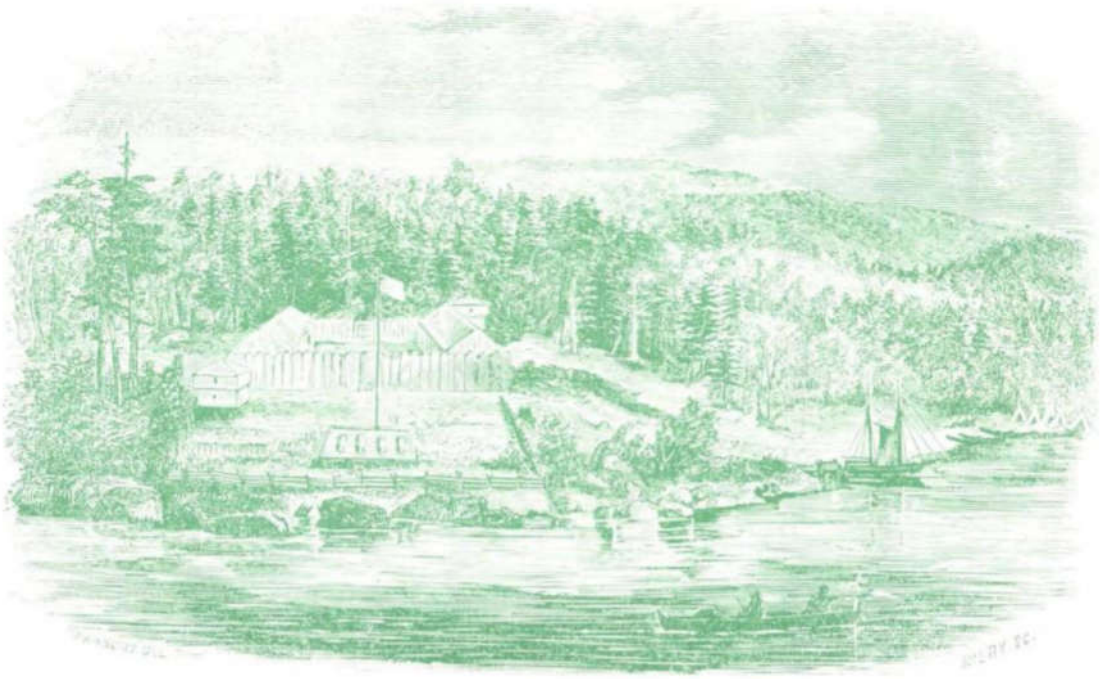
Thus it was that these three men, who later became so prominent for their services in the Franklin search, first came together.

In the early summer of 1839 both ships were at Honolulu, and Belcher ordered the *Starling* to proceed direct to the mouth of the Columbia River and await the arrival of the *Sulphur*, on which ship Belcher later joined her after carrying out some work in northern Pacific waters. The two ships met at the appointed rendezvous in July.

Belcher found that the shoals at the entrance to the Columbia had materially changed during the past two years, and both ships grounded. The *Sulphur* floated off undamaged on the flood tide; but the *Starling* was not so fortunate. On weighing anchor she "tailed" and lost her rudder. Belcher had not intended to take her up the river to Fort Vancouver, but this now became imperative. His account of the voyage to the fort and back follows.

HAVING seen the ship securely moored, and constructed a temporary rudder for the *Starling*, we started on the morning of the 31st for Fort George.

On the *Starling's* arrival Lieut. Kellett communicated with Mr. Douglas the chief of the Hudson's Bay Co. at Fort Vancouver, who very promptly sent us a guide, pilot,



Astoria, later Fort George, at the mouth of the Columbia, as it appeared when taken over by the North West Company from the Pacific Fur Company in 1813. From Gabriel Franchere's Narrative.

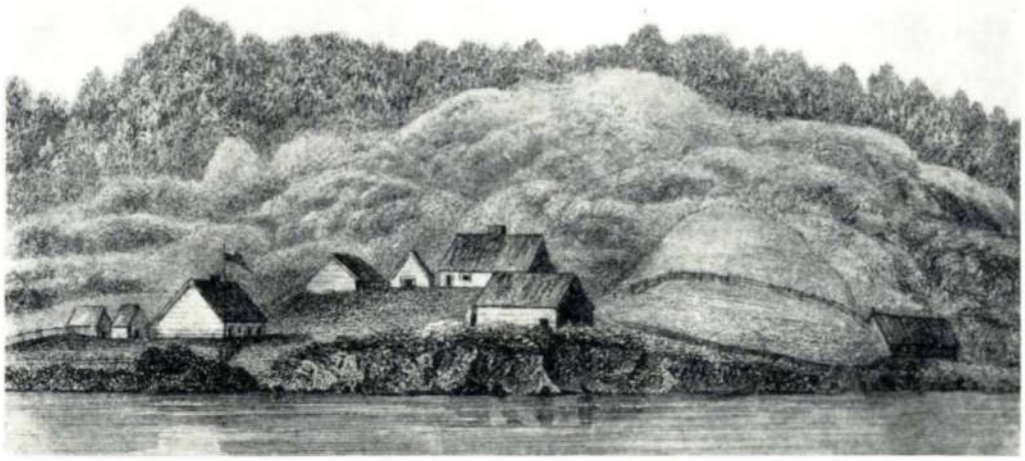
and interpreter; and Messrs. McLeod and Birnie came down to call on him. The latter is clerk in charge of Fort George. Off this fort, the well-known "Fort Astoria" of Washington Irving, we anchored for the night. It has dwindled considerably since the Hudson's Bay Co. took charge who removed their chief establishment to Fort Vancouver, and allowed it to run to utter ruin. Not a vestige remains.

A small house for Mr. Birnie, two or three sheds for the Canadians, about six or eight in number, and a pine stick with a red ensign now represented Fort George. Not a gun or warlike appearance of any kind remains. One would rather take it for the commencement of a village than any noted fort. The scenery is similar to that of all the northern coast—wooded to the water's edge, and differing little excepting in the varieties of pine.

The navigation is rather cramped, and it is really surprising that with so much capital at stake in shipping etc. the company have not brought up a set of pilots, by which many thousands might have been saved independent of the creation of such an useful body of men.

After walking the bounds of ci-devant Astoria in company with Mr. Birnie who explained where its lines formerly occupied, but where wilderness and desolation

Fort George as it appeared in 1839. From the two-volume work by Belcher, "Voyage of the Sulphur," published in 1843, from which the above extract has been taken.



now reigns, as well as examined the great fir mentioned by [David] Douglas, Mr. Birnie accompanied us on board to dinner, and afforded us much valuable information respecting the river as well as the natives.

On the morning following we proceeded on our voyage through the Tongue Point Channel, and after grounding occasionally, which I take to be according to practice, managed by sunset to find a soft spot for the night on "An unknown spot where no bank ought to have been" according to our pilots.

This delayed us one day because vessels grounding on the top of an evening flood do not float off with the returning day tide, consequently we were compelled to await the night tide, which is generally higher in the Columbia by about five feet, and probably caused by the sea breeze which blows strong near sunset.

Our detention occurred close to the "Pillar Rock" considered the second stage in the journey up. There is but little to interest one here, all the river, between this and Tongue Point as well as ten miles above being an immense archipelago of islands and flats. Pillar Rock rises abruptly from the river in five fathoms, and is about thirty feet above sea level. The summit has an area of ten feet by five, with light bushes and long grass.

On the 5th of August we passed around the southern side of Puget's Island and without anything worthy of remark reached Oak Point, where we anchored for the night. At Puget's Island the scenery may be said to change, the foliage being mixed with ash, willow, alder, maple, etc. I noticed the cypress also among the pine, but its timber here is of no value.

At Oak Point the river becomes narrow, and the navigation, from a general sufficiency of depth for vessels drawing fifteen to eighteen feet is very simple; the breeze generally blowing up the river from ten A.M. until four P.M. At several of my positions I noticed numerous water-snakes but they were harmless. They are termed "The fishing snake" by the people at Fort Vancouver, where I had an opportunity of witnessing their worrying a fish on shore by seizing it by the pectoral fin and *guiding* it into shallow water and eventually on the mud. In one of the largest of these snakes we found several full-formed young, probably within a few days of their birth; proving these reptiles to be viviparous.[1] . . .

On the 9th, after being nearly devoured by mosquitoes, we reached Fort Vancouver, where we were very kindly received by Mr. Douglas, and apartments allotted to us.

Fort Vancouver is situated in Lat. 45° 35′ 53″ N Longitude 122° 20′ 10″ and, as the crow flies, 82 miles from Cape Disappointment, the northern head of entrance into the Columbia.

It stands about 300 yards within the northern edge of the river; is a picketed enclosure three hundred yards square, the pickets being eighteen feet high, composed of roughly split pine logs. No particular attention to strength has been paid to its construction. It is furnished with three gates, two of which are invariably open by day. The houses of residence, as well as storehouses of the company are within this enclosure, forming two squares. No guard is observed. The trading store is open during working hours, and any increase in the number amongst the Indians would not excite uneasiness on the part of the officers.

In the eastern square the main building is occupied by the chief, in which also is the *sala* or mess room. In front of the steps of this building are two long twenty-four pounders ship guns, and two short merchant ship carronades twelve or eighteen pounders. . . . On the left, at right angles, are the quarters of the other clerks, traders, etc. Those who have married the Canadian half-castes generally live in their quarters, or only come to the general table when it suits. It is not a little strange in a community so long established, that the women should still be almost totally unacquainted with the language of their husbands.

In the rear of the fort is an excellent kitchen-garden and orchard occupying about the same space as the fort (three hundred yards on its sides) and behind this a large tract of cultivated land, with extensive storehouses, barns, etc., and abundance of grain in stacks.

To the westward are situated, without the palisades, at a distance of a quarter of a mile, the hospital and houses of the Canadian establishment, forming a complete village. All is apparently defenseless; although when turned out, every man will be found with a well-tried rifle and *couteau de chasse*, or other efficient means of defence; and their partners are efficient helpmates, in the literal sense of the word.

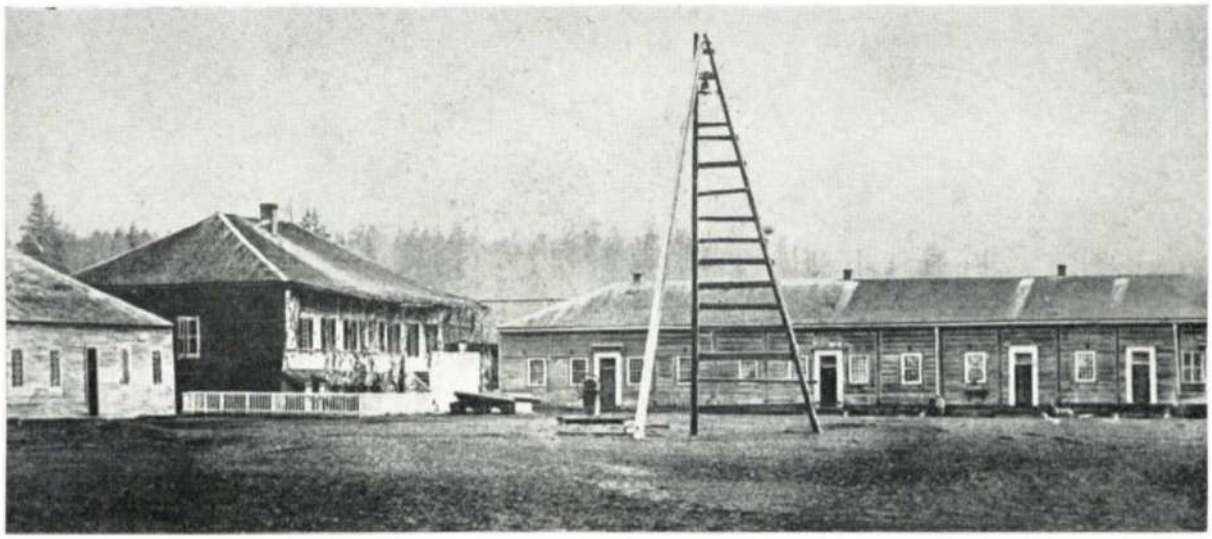
Yet comparing this spot with Sitka, and other places, it speaks volumes for the discipline to which the Indians have been reduced, as well as for the *content* with which all the tribes are evidently embued.

In the neighbourhood, about two miles down the river, they have a very extensive dairy, numerous cattle, sheep, pigs, goats, etc.; and, about three or four miles up the stream, water mills for grinding, sawing planks, and an establishment for curing salmon—the two latter objects forming the principal export to the Sandwich Islands.

Some few years since, the company determined on forming settlements on the rich lands situated on the Wallamette and other rivers, and providing for their retired servants by allotting them farms, and further aiding them by supplies of cattle, etc. That on the Wallamette was a field too inviting for missionary enthusiasm to overlook; but instead of selecting a British subject to afford them spiritual assistance, recourse was had to Americans—a course pregnant with evil consequences, and particularly in the political squabble pending, as will be seen by the result. No sooner had the American and his allies fairly "squatted" (which they deem taking possession of the country) than they invited their brethren to join them, and called on the American government for laws and protection!

This position has not only become the bone of contention which has again aroused the Americans, but from the fact of containing many of the old servants of the company unaccustomed to restraint, and whose first appeal is to their trusty rifle, is very likely to cause some

1. My copy of Belchers' book has a book plate "McClure." There are frequent marginal annotations and sketches. In the margin here is written: "Common in Esquimalt Harbour at the entrance."—G.M.D



Interior of Fort Vancouver in 1860, showing on the left the chief factor's residence, with the "two long twenty-four pounders ship guns" in front. *B.C. Archives.*

trouble. They are now loud in their claim of right to the soil, and a colony of Americans was en route in the plains when we quitted.[2]

The vessels employed by the company are as follows; one steamer and four sailing vessels.

Barque	Columbia	310	tons	6	guns	24 men
	Vancouver	324	"	6	"	24 "
Ship	Neride [Nereid]	283	"	10	"	26 "
Sch.	Cadboro	71	"	4	"	12 "
Steamer	Beaver	109	"	5	"	26 "[3]

The population in the employ of the company, including natives, etc., varies from five hundred and fifty to six hundred men and officers; but not more than ten native Indians are permanently employed. The hunters are equipped with hunting instruments, firearms, traps, etc., each outfit amounting to between £40 and £50 per man. The communication to Hudson's Bay in the March and September journey usually occupies three months and ten days.

The Wallamette settlement was commenced in 1830, by a few of the H.B.C.'s retired servants, which has increased up to the present period to fifty-four souls, or fifty-four farms. It includes: 24 Canadians, H.B.C.; 20 American stragglers from California; 10 Clergymen, teachers, etc., American Methodist Mission. . . .

The average produce of the soil per acre is as follows; 15 Bushels pease, 20 Bushels wheat, 30 Bushels oats, 35 Bushels barley, which is said to be consumed in the country.

Garden produce—peas, apples, plums, peaches, strawberries, raspberries and general kitchen stuff and potatoes, thrive, and are plentiful. The trade of the Columbia consists chiefly in furs. Timber, salmon, and butter, and potatoes, are exported to the Sandwich Islands. The climate is healthy, but rather unpleasant. The seasons gradually change, as in Europe: being temperate in summer, ranging as high as 95° to 100° in the shade, and in winter as low as 4°. The prevalent diseases are fever, ague, and catarrhal affections. Consumption is frequent among the natives.

Having completed the *Starling's* refit we commenced our return, surveying the river downwards. We had reached Puget's Island when we unfortunately drifted on a snag, (or stump of a tree under water) and broke her rudder short away, taking with it the lower part, with all the metal work. On this occasion I merely despatched the requisite officers to Fort Vancouver with fresh demands, and moved downwards with the *Starling* to Fort George, where I purposed bringing the ship [the *Sulphur* is meant here] to assist in the survey.

The *Starling* being complete, we dropped down to Baker's Bay, taking leave of our friend Mr. Birnie, in charge of Fort George, who had been unremitting in his attentions. . . .

On the morning of the 14th of September we quitted Baker's Bay, with light breezes, but, owing to the peculiarity of the currents, did not clear the heads until the wind failed, compelling us to anchor.

Before the tide had done, the sea-breeze came on very strong; very fortunately, I had taken the precaution to reef and be in a position to beat out, and had just completed, when the strength of the breeze parted our cable. Sail was made in time to tack short of the dangers, and as the opposite course led to sea, I was heartily glad, after this second escape, to leave the anchor, and get clear of this disastrous port.

Any attempt to recover the anchor would have proved futile, and probably resulted in losing the only one remaining, with imminent risk to the ship. The *Starling* at the same instant met with a similar accident, leaving also her last anchor but one.

Heartily sick of this nest of dangers we took our final look at Cape Disappointment and shaped our course for Bodega. ◆

2. The annotator of my copy has marked the last two paragraphs heavily with the remarks "True. True."—G.M.D.

3. This seems to me a very heavy armament for the crew available! Perhaps the guns were a defence against attack by Indians when at anchor.—G.M.D.

See "Iron Interpreters" in this issue—Ed.

Successful seal hunter. A drawing by Simon, an Eastern Arctic Eskimo of Cape Smith.

Eskimo Week

by Etienne Anaveluk

This is the first article that the "Beaver" has had from an Eskimo. It has been printed as he wrote it.

IT is a Monday morning and the hunter goes to see what the weather would be like, for he is impationed to go out after cariboo for his igloo is containing but a few pieces of meat.

Ah, he approves for the weather is as he hopes it to be, slightly cloudy and mild as this would help him to stalk his game silently.

So back in he goes in his dimly lighted igloo to have his usual morning tea after which he put on his outer cariboo skins garments and packs his lunch of frozen cariboo meat. All is now ready and off he goes toward the distant hill from where he thinks cariboo would be easy enough to see. But it is a long walk and as he nears the hill the skies are clearing and by the time he is on the top of it the sun is having its first peek and the hunter admires it for an instant, but not for long, for he starts to skan the hills with his telescope and in a short while he spots some cariboo grazing on the side of a hill. He glances the sky. It had developed into a crispy clear day and he thinks it is hopeless to try and get them, for clear days are hopeless days as the sound carries far, but, thoughts race through his mind —his wife and two boys and his igloo with but a few pieces of meat—so he determines to try his best. However this is a failure altogether and the hunter still has his frozen meat lunch and so he dicides to camp out.

Tuesday proves to be in favor of the hunter, cloudy and light snow falling, and out he goes from his tiny igloo. An hour or two later he spots a small herd of cariboo grazing in a valley. To the best of his ability he manages to close enough for a long shot and gets down one of them at the first shot, took two more shots but mist. However he is thankful for his one cariboo, skins it and takes the carcase back to his camp and arrives home just as the last bit of meat was in the proces of being cooked for the evening meal.

Wednesday, he plans to go out after more cariboo but the light snow flakes of yesterday have developed into a howling Blissard and he dicides to jig for tom cods instead. Out on the ice he goes and he makes a hole through thick ice. At noon his hands and feet are cold for lack of exercise. After he caught his third tom cod he goes in his igloo for his cup of tea after which he goes back to his jigging hole but he gets nothing for his afternoon effort.

Thursday, stormy as yesterday and hunter goes to jigging again. Today he is lucky, he gets ten tom cods. That is enough to last him and his family another day. Friday sees the Northwest wind blowing its hardest and the hunter stays in and dries his clothes beside a tin stove using willows as fuel.

Saturday, this afternoon the storm went down and the hunter is readying his hunting gear again, for the cariboo is almost gone again which he had got a few days ago. ◆

Etienne (Stene) Anaveluk is a Western Arctic Eskimo, 24 years old, who was educated at the R.C. Mission school at Aklavik, and who trades at Bathurst Inlet.

Mystery at Mack Lake

by Angus F. MacIver

Who owned the guns, the books, the camera, and the rotted tent, found in the wilderness 75 miles from Churchill? And why did he never return for them?

TWO guns turned over by me to the Royal Canadian Mounted Police have been returned a year later in accordance with law to become my property as in the interim the owner was not found. These guns were not the property of a man who had lived on Skid Row. Somewhere friends are wondering what happened to him.

When I first saw these guns I was trapping beaver in the spring at Mack Lake, the headwater of Herriot Creek, seventy-five miles as the plane flies and one hundred and fifty as the water flows, south-west of the nearest settlement, the port town of Churchill on Hudson Bay. Two days of unseasonably hot southern winds during the last week of April turned the deep snow and thick ice to swift-flowing, tumbling water. As I was there without a canoe, the change in weather put an end to my work. The last trap to be picked up was in the Herriot Creek, about a mile below the lake. I had gone about a quarter of the distance and was pushing my way through a thick growth of small spruce when I came upon an old tent, one end over a pole that rested against a tree, the other on the ground.

I walked over to investigate. Lying close by the tent was a pile of badly rusted traps. In size these were ones, one and a halfs and twos, commonly used for muskrat, mink and marten, fours for taking beaver, and half a dozen or so otter traps, large and strong with heavy teeth projecting from the jaws, a type I had never known to be sold in this part of the country.

The otter traps showed that almost certainly this camp had been made by a white man. No native would have traps procured in a distant market.

I lifted the canvas. All but the part held above ground by the pole fell to pieces in my fingers. There were exposed to view two guns, rubber hipwaders, two carefully rolled tumplines, a camera, a pump gun for fly repellant, several books, a pile of .270 rifle shells and the brass ends of shot-gun shells. Ice held most of these firmly to the ground.

Everything had the appearance of being old, of having been exposed to the elements a long time. I knew the camp must have been set up more than two decades before as the basin of Herriot Creek had been my trapping ground for twenty-one years and during that time positively no one has trapped it except myself and men working with me.

The owner of this tent may have been white or he may have been black, but he was not an Indian. He could read, and the printed word was of such value to him that he brought books on a trip to a spot so remote, that every ounce of weight had to be carefully considered. The camera, of a type to which I was not accustomed, left no doubt in my mind that it had been expensive.

Fine carving on the wooden parts of the twelve-gauge double-barrel shot-gun, and unusual working on the slide action of the twenty-two calibre rifle distinguished them from models sold in the North. The missing .270 was the longest in range and most powerful in action of any gun with which I was acquainted.

I could not believe this man had left the area alive, as no one would discard such an outfit. From the .270 shells on the ground and no .270 gun it appeared possible that he had left the tent on a hunting trip and never got back. Colour was lent to that supposition by there being no packsack.

Here was a problem for the Royal Canadian Mounted Police.

Although I knew nothing should be disturbed, in order to delay further rust and decay of the guns I did lift them and place them against a tree.

Immediately on my arrival in Churchill I reported the find to Sergeant James McCardle who at that time was in charge of the local detachment of the Mounted Police. There was no record of a missing person to whom my report might apply. However, Sergeant McCardle said the owner could be traced by the numbers of the guns, as it had been required in Canada since World War I that all guns be registered. In August, he also said, a plane belonging to the R.C.M.P. would be based in Churchill and I would be required to go at that time to Mack Lake to point out the location of the camp.

Other than the checking of gun registrations, what enquiries were made by the police are unknown to me, as the Force conducts their work with a minimum of publicity. My interest, however, led me to talk to everyone whom I thought might be able to throw light on the mystery.

The Hudson's Bay store in the town had no record of such a disappearance, as it would have had if a man went into the wilds from any of their posts and failed to return.

The Indians of all the surrounding country were living for the summer in shacks and tents around the townsite. My questioning here was among the older men. Did any know of a white man disappearing? None had and all declared that previous to my coming they had never heard of a white man going up Herriot Creek.

The older residents of the town were consulted. Alexander Oman, born at the Hudson's Bay post and always living in Churchill, had throughout most of his working years been an employee of the Company. Among his responsibilities had been the keeping track of trappers working out of Churchill. He assured me that he would have said definitely that no white man except me and my associates had ever trapped the headwaters of the Herriot

Angus MacIver is a veteran trapper of the Churchill district. He has contributed articles on wolves and wolverines to the Beaver.

"Here was a problem for the Royal Canadian Mounted Police." *Lloyd Scott.*

Creek, known to him by its earlier name, Churchill Creek. Questioning of others proved equally fruitless.

During August the police plane arrived, but previous commitments proved so heavy that the Royal Canadian Air Force was requested to make the trip. This they consented to do. But when at the appointed time I arrived at the airstrip with two of the police constables, the pilot said I could not be included in the party, as no authority had come from Ottawa for him to fly a civilian.

I marked the camp site on a map and gave the constables as explicit directions as I could for locating it.

Towards evening the constables called at my house in town to tell me that my directions, carefully followed, had revealed only that I was trapping in beautiful country.

Shortly before the plane was put down on Mack Lake, the young men had sighted beside an old camping place of mine on the creek a mile below the lake a teepee-like pile of wood put up to dry. For some reason they decided that was the place where the search should be made. In paddling their small canoe down the creek and back to the plane, they had seen no fresh cuttings.

There the matter rested until the following winter when I was again at Mack Lake. So deep a blanket of snow had fallen during the early part of the season that all evidence of the camp's existence except the ends of the gun barrels was hidden. I took the guns with me and when I returned to town, gave them to the police.

A little over twelve months later the guns were brought back to me. The police had not succeeded in tracing the owner. The guns had never been registered in Canada.

Again my mind is actively concerned with the question of who pitched that tent in the vicinity of far-off, lonely, Mack Lake and what was his fate. The number of guns and their quality and also the type of camera point unmistakably to the owner having been far from poor in this world's goods.

Both the waders and tumplines indicate that he was a man accustomed to travel off the beaten trail. None but a very experienced outdoor man would have the equipment to patch waders or the skill to do so as efficiently as these had been done. Did the two tumplines indicate that this camp was set up by two men or was it the headquarters of one man sufficiently experienced in travel by canoe to know a second tumpline often saves time and effort when several loads have to be portaged?

Why was this man at Mack Lake?

The traps, nicely assorted in size for the fur bearers to be had in the vicinity, show his intended occupation was trapping. Yet I feel that to trap was not his basic reason for being there, as at that time much more readily accessible trapping grounds much nearer fur markets were available. Was he a prospector or was he a writer in search of unusual experiences?

Until the opening of the Hudson Bay Railway in 1929, The Pas, five hundred miles south-east, was the nearest settlement—other than a few Hudson's Bay posts—to Mack Lake.

There were three ways only—as a matter of fact still are—by which Mack Lake could be reached, airplane, dog team and canoe. By airplane was the easiest and most direct. If the flying were done by a bush pilot, surely an arrangement was made for him to return and bring out his passenger. If our man flew himself in, why is there no trace of a plane?

A dog team could have been used during the winter, but there are no signs of dogs having been tethered near the tent, nor of harness, of toboggan, komatik or sled. Certainly he did not have dogs. And if he did come during the winter, why did he provide himself with a gun for fly repellant?

The most difficult way to have reached Mack Lake was by canoe, up Herriot Creek. If our man came this way he must have come down the Churchill River, possibly beginning his trip by water at Flin Flon, the closest railhead to here and not far from the waters of the Churchill. The usual procedure would have been to continue down the river twenty-five miles and present himself at the Hudson's Bay post there to get information and supplies. That was not done, an indication that the newcomer wished to keep secret his presence in the area.

The trip from the mouth of the Herriot to the headwater would take a man travelling alone well over a month as there are hundreds of rapids to be climbed, some over a half-mile long. The much patched waders suggest he did come this way.

I know from experience that on the creek a canoe taken by ice will almost certainly be thrown on shore, either whole or in pieces. I have travelled the entire length of the creek many times by dog team and have gone down it once by canoe without seeing a canoe or any part of one along the bank. As well, several winters I have run a trapline for fox around the shore of the lake and have seen no indication of a canoe there.

A lack of any sign of much wood having been cut does establish the fact that the owner was not at the tent for very long after winter set in.

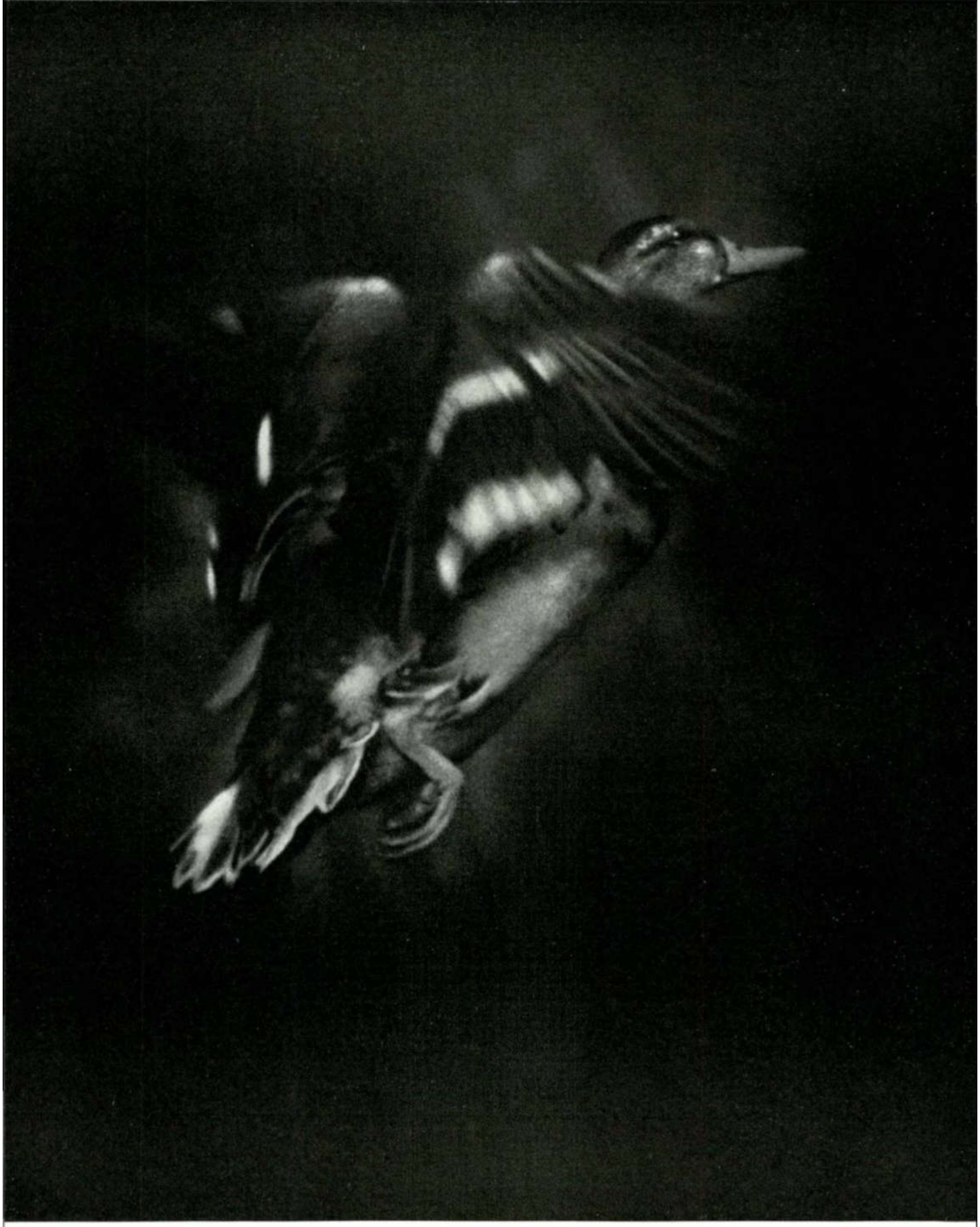
The barren-ground caribou cross Mack Lake during both the spring and fall migration. I have often found that ice over which they had passed would not hold my weight, which is much less than two hundred pounds. A possibility is that after ice had formed, the man was hunting caribou on the lake and broke through.

Murder is a possibility that cannot be overlooked. But if murder it were, it was not committed by an Indian. In that case, regardless of the motive for the crime, the traps, the guns, the tumplines, the waders, everything an Indian could use, would have been taken.

If a white man did away with this man, it may have been a partner who accompanied him for the express purpose. The two tumplines indicate there may have been more than one man in the expedition. The missing gun would have been the best both for protection and for obtaining meat in getting back to civilization. A man making such a trip would not want to be burdened by the weight of more shells than needed.

During the spring thaw the ice of the lake and of the first few miles of the creek melts rather than breaks. As a consequence there is never a great rush of ice in the vicinity of the camp. The canoe or some part of it should have shown up. Its complete absence may indicate it was used for a get-away.

Everything I found at the tent except the guns is still there. It is possible the books may carry the name of the man who owned them or that the language in which they are printed might furnish a clue. Even at this late date the plates or film in the camera if processed in a good laboratory might show something. However, most likely if the missing man is identified it will be through the numbers on the guns. I shall be glad to compare these with any submitted to me. ◆

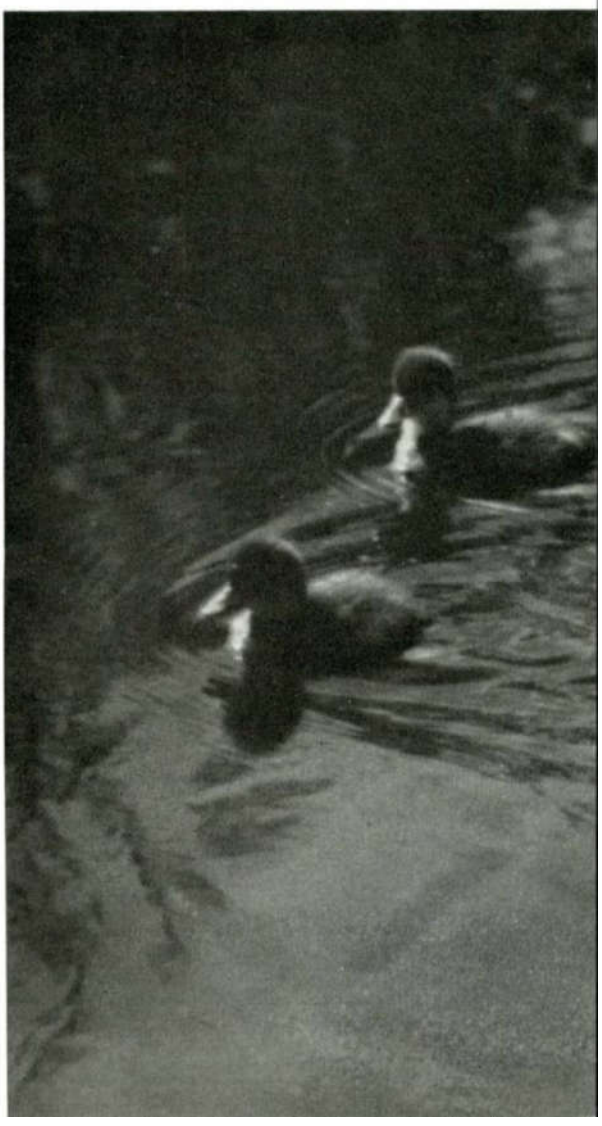


Mallard Rising

King Eider Duck on Nest

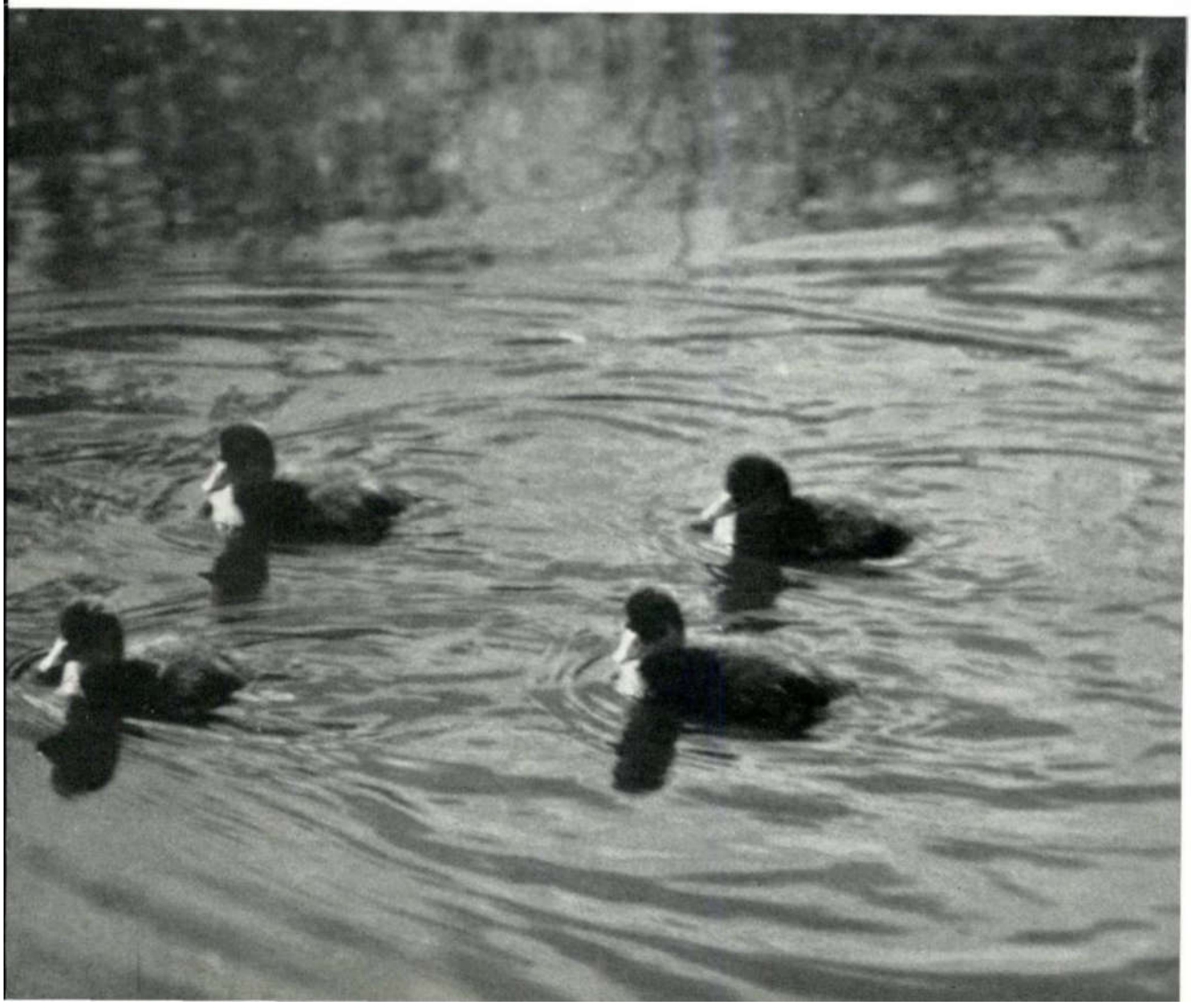
WILDFOWL STUDIES

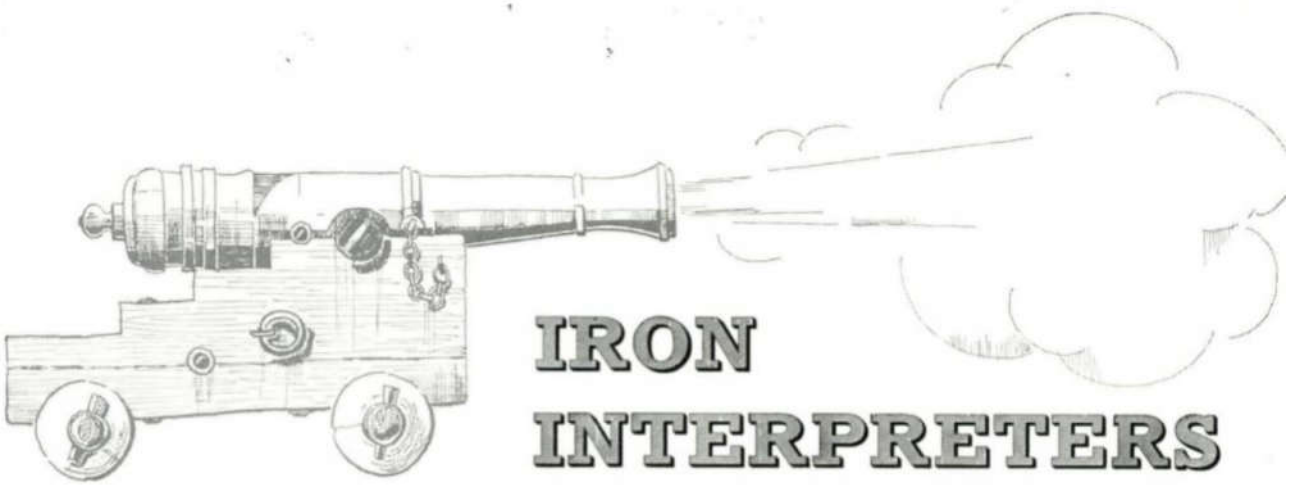
by Lorene Squire



Young Widgeons

Greater Snow Geese





IRON INTERPRETERS

by Donald H. Clark

Greatly outnumbered by the belligerent Indians of the Pacific Coast, white traders sometimes had to use cannon to subdue them.

"OUR iron interpreters will have to settle the dispute," declared James McMillan, when savage Yucultas from Vancouver Island threatened to attack Fort Langley's garrison in the spring of 1828 and carry off the trade goods. When the "grapevine telegraph" carried word to Yuculta villages on Johnstone Strait and Yuculta Rapids that Fort Langley's cannon were loaded with deadly grapeshot, and each of its swivel guns with musket balls, they decided to delay their attack until the weather was better.

It took those fierce northern Indians almost nine years to overcome their fear of cannon fire. Then they came up the Fraser River in scores of big cedar war canoes, each loaded with twenty or more armed warriors. When opposite the fort, the armada turned diagonally across the river and paddled furiously toward the stockade.

Every man in the post was in one of the bastions or on the gallery, and every cannon and swivel gun was trained on one of the canoes. When the Yucultas came within point-blank range, the guns barked in unison. Many canoes were blasted to fragments; others were so badly demolished that they sank at once. The invaders who survived the deadly bombardment were finished off by their ancient enemies, the Fraser River Kwantlens.

Battling these natives was a disagreeable necessity for the peaceable traders, whose only alternative was to be massacred by an arrogant tribe which had dominated the region for many past generations and resented any interference with their marauding. The Yucultas weren't a bit impressed with white men who dug in the ground and performed other tasks which should have been the work of squaws.

Neither were they completely awed by the white man's fort or his firearms. They had strong forts of their own—some with twenty-foot palisades—and they owned plenty of trade muskets and ammunition. The one terrible weapon which they couldn't match, and against which their forts and canoes were helpless, was cannon. The guns were particularly effective along the seacoast where Indian villages offered easy targets to armed ships.

Head-hunting Haidas came within an ace of capturing the Boston schooner *Lady Washington* when it anchored in the Queen Charlotte Islands to trade during the month of June, 1791. When Indians boarded the ship, a few crew members got to the cannon and fired grapeshot into the swarming Indians on deck. The surviving Haidas went overboard, leaving fifty dead and dying. Then the cannoneers turned the guns on Haida canoes, and few Indians reached the shore.

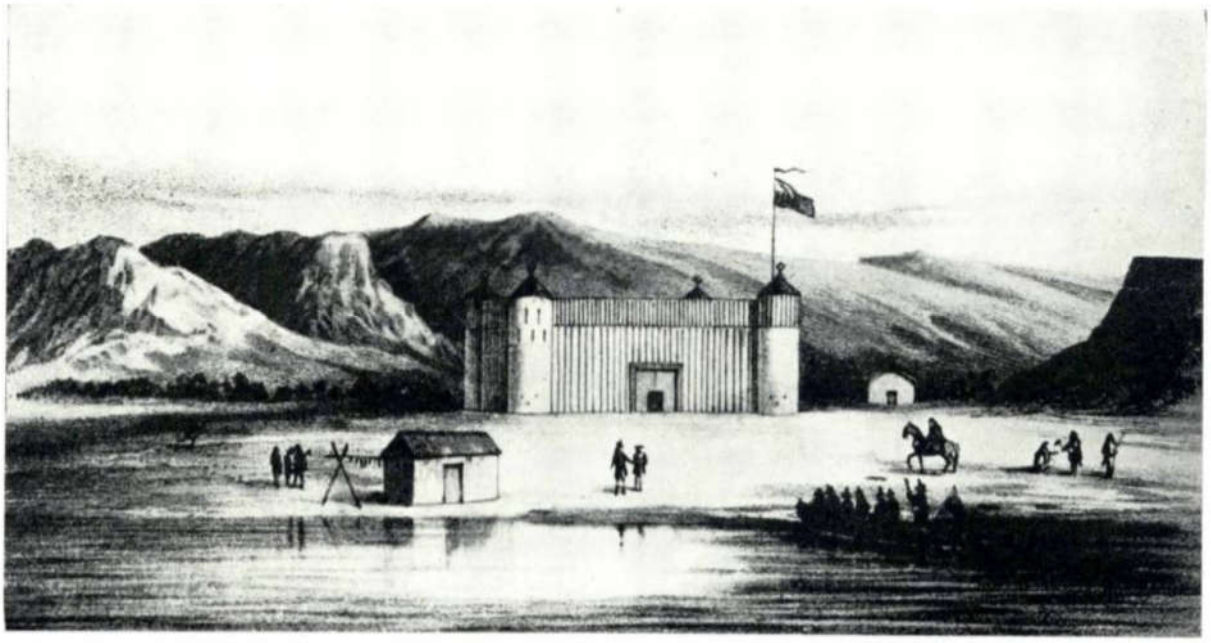
This type of Indian attack on trading ships, and their defeat by cannon fire, was repeated scores of times during the following seventy-five years with almost monotonous repetition of detail. The one authentic instance on record of natives using cannon against white traders ended in the whites being driven off. This happened in 1795 when the British trading ship *Phoenix* sent a watering party ashore in the Queen Charlotte Islands. Haidas attacked the party, killing one man.

When the ship's guns were brought to bear, they were answered by vigorous cannon fire from the nearby native village. The *Phoenix* hoisted anchor and took off. Investigation revealed that the cannon and ammunition had been taken by the Haidas from the Boston schooner *Resolution* which they had captured the previous year.

Ten years later—on July 16, 1805—Captain Samuel Hill found six cannon mounted on dirt ramparts at a Nootka village in Friendly Cove on the west coast of Vancouver Island. He anchored his ship, the Boston trading brig *Lydia*, at a distance of two hundred yards from the battery. When the guns remained silent, he headed a shore party which found that the guns were in fairly good shape and supplied with ammunition. The Nootkas either didn't know how to use the cannon or weren't feeling particularly hostile, so Captain Hill took the artillery aboard and sailed away.

These cannon proved to be from the schooner *Boston* which the Nootkas had captured two years earlier. They had boarded the *Boston* before the crew could get the guns in action, killed all but two of the whites, and then beached and burned the ship.

Donald H. Clark, Ph.D., is assistant director of the Institute of Forest Products of Washington State. He is also a free-lance writer, specialising in the historical background of the Pacific Northwest States.



An imaginative artist's drawing of Fort Nez Perce, at the confluence of the Columbia and Walla Walla Rivers. The walls would actually be about half the height shown, and the bastions square. From Ross's "Fur Hunters"

The Boston trading ship *Atahualpa* barely escaped the same fate earlier that year when it was boarded by Haidas in Millbank Sound. The captain and nine crew members were killed before Chief Mate John Hill manned the swivels and carriage guns and swept the Indians off the deck. When the attackers tried to cut the *Atahualpa's* bow cable, Hill turned the guns on their canoes and blasted them to bits.

Interior trading posts which were supplied only by pack trains or by light canoes usually were not armed with guns of any size, but those on navigable water often mounted cannon as large as 18-pounders. Strong wooden bastions containing heavy cannon stood at each corner of the stockade built by Donald McKenzie of the North West Company in 1818 at the confluence of the Columbia and Walla Walla rivers. The cannon were brought to this trading post—called Fort Walla Walla or Nez Percé—by heavy bateaux from Fort George near the mouth of the Columbia.

Fort Walla Walla was heavily armed because of its isolated location amidst warring Indian tribes. The fiery Nez Percés to the north were always ready to fight at the drop of a head-dress, and feared nothing but the white man's "thunder guns." In addition to the big guns in the bastions, a coehorn or small mortar was mounted over the main gate, and ten swivel guns or "wall pieces" along the gallery below the palisades.

When the North West Company made its final inventory in the spring of 1821, the records show that thirty-two cannon of six different types, varying from 18-pounders to ½-pound swivel guns, were in use by the Columbia River Department. The list of property turned over to Hudson's Bay Company included the following under the heading, "Artillery In Use."

"2 Guns 18 pounders
2 Carriages for do.
2 Cast Iron fore trucks
2 " " hind "
120 round shot 18 prs.
120 Cannister shot 18 prs.
1 Copper powder measure
2 Sponges & Ramrods for do.
2 Cop. powder Ladles & worms
2 Brass Locks for do.
7 Guns 6 prs.
3 Guns 4 prs.
10 wall pieces
1 fine gun hf. stocked
2 Brass " 4 prs.
1 Gin for mountg. Artillery
8 Iron swivels ½ pr.
390 round shot 6 prs.
95 " " 4 "
58 " " ½ "
5 Cannister " 4 "
111 Grape " 6 "

One of those 18-pounders was probably the gun which Narcissa Whitman, wife of the famous missionary Marcus Whitman, found in her quarters when she was a guest at Fort Walla Walla on September 1, 1836. "A large cannon always loaded, stood behind the door by one of the [port] holes," she wrote her mother after having slept in the west bastion. With guns in the guest rooms, it is understandable why that fort was called "The Gibraltar of the Columbia."

Doctor John McLoughlin's personal quarters at Fort Vancouver, which he established on the lower Columbia River in 1825, were flanked with two brass cannon and piles of cannon balls. The bastions and walls of the fort were also heavily armed with artillery. The fort's inventory for 1826 carried the following items under "Articles In Use."

"Artillery"

"2 Carronades 9 pdrs. p. *William & Ann*
2 Guns 18 pounders wt. carges. complete
4 do. 6 " " "
4 do. 4 " " "
7 do. Iron Swivels
2 do. Wall pieces
1 do. Iron Cohorn
2 do. Brass ½ prs.
120 Canister shot for 18 pounders.
120 Round do. " " "
365 " do. " 6 "
78 " do. " 4 "
225 " do. " ½ "
78 Grape Shot."

Over 85,000 Indians inhabited the area included in the Department of the Columbia, and one of John McLoughlin's jobs was to create a recognized authority over the tribes. He found that this required more than verbal persuasion.

In the spring of 1828, the Clallams who lived along the south shore of Juan de Fuca Strait challenged the wrath of white traders by murdering Alexander McKenzie and four of his men who were travelling from Fort Langley to Fort Vancouver. "The murderers had Dances among themselves to celebrate the deed," wrote McLoughlin, "& sent us word to come & revenge it, that they were ready. To pass over such an outrage would lower us in the opinion of the Indians, induce them to act in the same way, and when an opportunity offered kill any of our people, & when it is considered the Natives are at least an hundred Men to one of us it will be conceived how absolutely necessary it is for our personal security that we should be respected by them, & nothing could make us more contemptible in their eyes than allowing such a cold blooded assassination of our People to pass unpunished."

Accordingly, the Company's 70-ton schooner *Cadboro* with Lieut. Aemilius Simpson in command, was sent to attack the Clallam village at New Dungeness with a party commanded by Alexander Roderick McLeod, assisted by Francis Ermatinger and others. The *Cadboro's* cannon raked the village and surrounding woods with grapeshot to drive the Indians out, while McLeod and Ermatinger took a landing party ashore to burn the village and destroy some forty canoes. Several Clallams were killed before the *Cadboro* sailed for Port Townsend to destroy the Clallam settlement on Port Townsend Bay.

Somewhat less bloody but quite effective was the punishment of the Clatsops at the mouth of the Columbia River during the following year. The Hudson's Bay Company brig *William and Ann*, loaded with trade goods for Fort Vancouver, had gone aground near the river's mouth, strewing trade goods along the beaches. None of the ship's crew had survived. The Clatsops purloined the cargo and refused to turn any part of it over to company officials. They also had possession of one of the *William and Ann's* boats, complete with oars, which indicated that a boatload of survivors might have been murdered.

When the Clatsops became arrogant, an armed schooner was sent from Fort Vancouver to blast the Clatsop village and recover the stolen property. They succeeded so well that when a Yankee ship went aground in the same place somewhat later, the cargo remained untouched by the Indians, although the crew had abandoned the ship and sought refuge at Fort Vancouver.

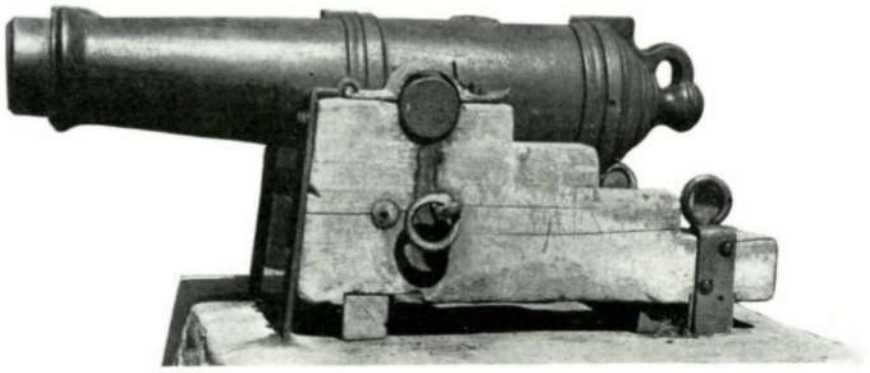
Hudson's Bay Company officials at Fort Victoria had to deal with a number of tough head-hunting tribes in their trade territory which included Vancouver Island, the west coast of British Columbia's mainland, the Queen Charlotte Islands and southeastern Alaska. Shortly after the fort was established in 1843, the Songhees moved their camp to the immediate vicinity of the stockade, much to the annoyance of the traders. When members of that tribe killed several cattle and horses belonging to the post, Roderick Finlayson demanded immediate reparation to be paid in furs.

The Songhees replied by firing at the post buildings, whereupon Finlayson loaded a 9-pounder carronade with grapeshot and destroyed the largest of the Songhee lodges with a single blast.

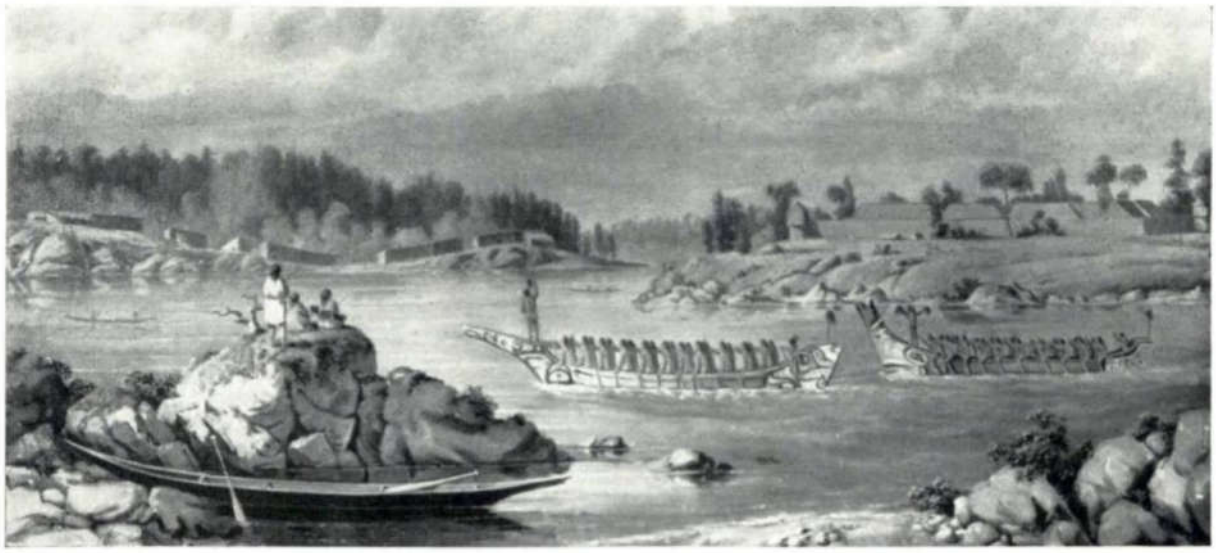
At Finlayson's suggestion the Indians then towed an old canoe out into the bay and watched while one of the fort's guns smashed it with a single round-shot. Hitting a bobbing canoe at that distance with a shot from a smooth-bore cannon must have included a measure of luck, but nevertheless the Songhees paid for the slaughtered live stock and obeyed Finlayson's order to move their village.

Hudson's Bay Company maintained a large herd of sheep at Saanich, north of Fort Victoria. A company shepherd, Peter Brown, was killed by a wandering Indian from the Cowichan villages near Nanaimo on the east coast of Vancouver Island. The murderer fled to his own tribe for protection, where he was traced on January 6, 1853, by a punitive expedition led by Governor James Douglas. Swarms of heavily-armed Indians met the party and offered Douglas nothing but arrogant hostility. Douglas worked his armed launch and pinnace up the shallow Nanaimo River to the Cowichan stronghold and trained their brass cannon on the twenty-foot palisade.

When the cannoneers started to load, the Cowichans remembered what had happened at the Songhee village



Left: Four-foot bronze cannon bearing early Massachusetts coat-of-arms, recovered from the wreck of a trading ship in Neah Bay, Washington Right: Gun from Fort Nisqually, now on view in the rebuilt fort near Tacoma, Washington.



In this picture by Paul Kane, the lodges of the Songhees are seen on the left. Fort Victoria, from which the gun was fired that demolished one of them, is on the right. *Royal Ontario Museum*

and opened the gates for a parley. Douglas then arrested the two Indians who had been implicated in Brown's murder and hanged them later at Fort Victoria.

Next to demand the services of "iron interpreters" was haughty Ot-Chee-Wun, chief of the Kuper Island tribe. From his Lamalchi Bay headquarters on Stuart Channel, the chief had raided and murdered for six years before exhausting the patience of Hudson's Bay Company officials. The pay-off came early in April, 1863, when the Kuper Islanders killed white settlers Bill Brady, Frederick Marks and the latter's married daughter.

Governor Douglas sent H.M.S. *Forward* to destroy the chief's fort, which was built of heavy logs and loop-holed for musket fire. It was fully as strong as the bastions of Fort Victoria, but the *Forward's* guns knocked it down after a half-hour's bombardment. It took another three weeks for the entire British fleet in the north Pacific to catch chief Ot-Chee-Wun in a lively game of hide-and-seek among the islands. They finally tagged the old redskin and three of his worst warriors, and hanged them at Fort Victoria on July 4, 1863, in the presence of the Kuper Island tribe.

When Clayoquot Sound Indians on the west coast of Vancouver Island captured the trading vessel *Kingfisher* the following year and killed three white traders, Rear Admiral Joseph Denman took H.M.S. *Sutlej* and H.M.S. *Devastation* to blast nine villages, sixty-four canoes and quite a few hostile warriors at Shelter Arm, Cypress Bay, Bedwell Sound and Herbert Arm.

Late in 1865, Lieutenant J. C. Carey in H.M.S. *Clio* gave the same treatment to hostile villages near Fort Rupert on Queen Charlotte Sound when they refused to surrender three murderers. Carey arrested the chief and the three fugitives after destroying the village and over a hundred canoes by cannon fire.

Analysis of the many cases in which cannon were turned against natives reveals that the guns were not used wantonly or indiscriminately, but only as a last resort after attempts at negotiation had failed. When the many tribes along the northwest coast finally became convinced that pillage and murder would be paid off in grapeshot, cannon were still carried on trading ships and mounted in the bastions of trading posts as a warning.

In the fall of 1858, when the Hudson's Bay Company's famous steamer *Beaver* was trading for furs in southeastern Alaska, Chief Trader Dodd discovered the head of Colonel Isaac N. Ebey, a Whidbey Island settler, on display in a Stikine village on Kuiu Island. He reported his find to Captain Swanston of the *Beaver* who ordered the guns loaded and sent word to the village that the colonel's head was to be brought aboard.

His ultimatum set the village humming like a nest of red hornets, and four war canoes filled with Stikines paddled out to surround the *Beaver*. When ten of the warriors boarded his vessel, Captain Swanston had the ship's guns run out, and shouted that he'd destroy the canoes and all aboard them if they didn't pull away at once.

The boarders jumped into the water and the canoes retreated. After the village quieted down, trading was resumed and Chief Trader Dodd eventually recovered Colonel Ebey's head for six blankets, three pipes, six heads of tobacco, one fathom of cloth and one handkerchief.

In city parks and museums of western Canada, Washington and Oregon, tourists and Sunday visitors examine and photograph ancient muzzle-loading cannon with amused smiles. Compared with atomic artillery and guided missiles, these crude weapons seem to be relics of prehistoric days.

The old guns are silent and anonymous now, but if they were vocal most of them could tell of stirring events in the early northwest fur trade. In their heyday they had lusty voices which spoke the unmistakable language of white man's power in a wilderness peopled by warlike savages.◆

W. Kaufmann

Snow Geese

Dr. E. O. Hohn, the author of the article on snow geese in the last *Beaver*, writes in to say that of the birds banded by him in the summer of 1953, five have been shot by hunters, and the bands returned to show that the birds were killed as follows:

Oct. 19, 1953: near Bashaw, Alta. Oct. 16-Nov. 18, or Dec. 8-Jan. 10: Lasser County, Calif. Dec. 8: Tule Lake, Siskiyou County, Calif. Dec. 31: Butte County, Calif. Jan. 6: Sutter County, Calif.

In addition to these, one banded in Siskiyou County on Nov. 9, 1952, was shot on Banks Island May 30, 1953. Thus the wintering area of the Banks Island birds is pretty clearly established.

Duke Down North

When it comes to dealing with food the white man generally figures he can show the Eskimo—the "eater of raw meat"—a thing or two. But at the buffet luncheon put on for H.R.H. last month at Coppermine, the Eskimos showed the white man. Five native couples were invited, and were served their portions on plates with the customary utensils. But while the whites stood around picking at their food with becoming decorum, the Eskimos, to whom the white man's taboos mean nothing, simply sat down on the floor, put their food in front of them, and attacked it with both knives and forks. The whites, our special correspondent says, looked envious, but continued to maintain their gentility while the Eskimos went for second helpings.

The Duke's tour was thoroughly covered by the Press, and one Canadian paper (not a million miles from here) showed a picture of him shaking hands with Patsy Henderson whom it identified as an "Eskimo chief." As will be seen on page 18 of this issue, Patsy is a Tagish Indian, not an Eskimo. Furthermore, there is no such thing as an Eskimo chief.

In the adjoining column, Charlie Klengenberg of Coppermine, from whom the Duke accepted some stone carvings, was described as a "half-dressed descendant of the first white trapper-trader-settler." Probably didn't have a clean seelapak to his name.

Yukon Steamers

In the picture story on Yukon River sternwheelers that appeared in the summer *Beaver*, the statement was made that the *Whitehorse* was the only one now operating. That, we are delighted to say, is not true. The Canadian Pacific Airlines have reconditioned the *Klondike* (which was also shown in one of our pictures) and put her back into service as a tourist attraction.

New Aklavik

Communities along the St. Lawrence aren't the only settlements that will have to be moved. Early this year the Canadian Government announced its intention of moving Aklavik, near the mouth of the Mackenzie, to a drier site. Several years ago when a trading post was established there, no one imagined that a settlement of

400 (winter) to 700 (summer) would ever inhabit that damp, low-lying spot, and neither could they foresee the erection of such large buildings as hospitals, churches, and hotels.

To its inhabitants, Aklavik (especially in the spring) has become synonymous with Mud. But even they were surprised when scientists from Ottawa announced that half of the "soil" consisted of water in the form of ice crystals. These men from the Building Research division of the National Research Council are experts in permafrost studies; and they estimate that if the warming climate together with the heat from the buildings should make the frost thaw as far down as ten feet, the surface on which Aklavik stands would drop right down to the level of the river.

The immediate problem in the job of moving an entire village in that liquescent region is to find a suitable site to move it to. This summer a survey team of Ottawa scientists headed by geologist Curt Merrill has been exploring the possibilities with a special permafrost drill rig—and have even succeeded in bringing up some permafrost cores. Their findings will greatly assist the Government in determining the new location of "The Metropolis of the North."

Beaver Index

Before long the *Beaver* will be issuing a complete index covering all issues, from the start of the magazine in October 1920 to the close of Outfit 284 (March 1954). To prepare it has been a long and exacting task; but the typescript, covering 67 pages of two columns each, is now complete, and the finished product should be ready for distribution before the end of the year. If you would like to a have a copy (which will be priced below cost) please let us know as soon as possible.

Franklin Relic?

One of our British subscribers, Evan Evans of Eastbourne, wrote to us in June to recall a tale of the Franklin Search he had heard as a boy in the 1890s. At a lecture by Rev. Egerton R. Young he had listened to the missionary tell of attending the deathbed of an old Indian named Paulet, who confessed that when he was on one of the search expeditions, he had sighted the masts of a ship near the spot where Franklin perished; but having been away from his wife and family for a long time, he had said nothing about it, fearing that the expedition would be prolonged.

We looked up Chief Factor James Anderson's Journal of his expedition of 1855, from Fort Simpson to the mouth of Back's River and return, and found that one of his Swampy Cree steersmen was named Paulet Papanakis. On August 2nd, Anderson recorded that his men were sent to explore Montreal Island, north of Back's River mouth. Some traces of the Franklin expedition were found including two pieces of wood, one carved with the name of the *Erebus*' surgeon, and another with the word *Terror*. The search continued on the 3rd, 5th, 7th, and 8th, along the coast and on the islands, but no vestiges of ships were reported except a few more pieces of wood.

George M. Douglas (p. 38) told us that the old Indian's story was embodied in a chart prepared by R. T. Gould of the Royal Navy, and copied in a map drawn to illustrate an article by Major L. T. Burwash in the *Canadian Geographical Journal* for 1930. The notation off Point Ogle reads: "Wreck hereabout (probably 'Erebus') repd. sighted and kept secret by Anderson's guides (1855)." Mr. Douglas also said he heard the story from Dr. J. B. Tyrrell who met a man from Anderson's party on one of his early expeditions. Which isn't too surprising when you consider that Dr. Tyrrell was born when McClintock was still looking for Franklin.

We wrote to Dr. Tyrrell, who referred us to a paper he had read on the subject before the Canadian Institute in 1908. Eighteen years before that he had met on Lake Winnipeg an old French-Canadian, Joseph Boucher, who had been on the Anderson expedition. Boucher had said that besides Papanakis, Edward Kipling and Thomas Mustagan had seen the masts of a ship; but information obtained independently by Dr. Tyrrell from these three men showed that only Papanakis had reported seeing them.

When Anderson's journal was published in the *Canadian Field-Naturalist* for 1940-1 under the editorship of C. H. D. Clarke, the subject was discussed at some length in the February 1941 issue. "Perhaps some future explorer will go to Paulet's Island," wrote Dr. Clarke, "and look out to sea, to see if there is anything that could be mistaken for the masts of a ship." But of course it would still be possible for an Indian to sight something in the far distance which a white man could only see with a spy-glass.

Pictorial

Most people say that they like the *Beaver* because of its outstanding pictures. And yet the issue which got more kudos than any recent one was the Rae Centenary for last March, which didn't contain a single fine photograph. This autumn issue carries 23 pages of large photos—more than any *Beaver* to date—and we'd be glad to know if you like it that way.

Northern Books

HOW TO BUILD YOUR HOME IN THE WOODS, by Bradford Angier. Geo. J. McLeod, Toronto, and Sheridan House, New York, 1953. 304 pages.

Reviewed by H. A. Dowler.

THIS is an encyclopedia of everything and anything about building in the wilderness for simple living, and out of the material found around you. All that seems to be left for the Angier disciples is to do the things described in this book, well or poorly.

To keep an axe in good order, to cut a stick without sinking the axe into the ground, or your foot, is a test of care and skill and something to be proud of. It might have been mentioned in this book, that to hit twice or more in the same place with an axe is equivalent to hitting a golfball consistently.

The book should be a wonderful guide to those of insufficient experience who decide to explore or adventure in a new field for them. Advice as to how to do the things described in this book will be a start for a great many people—a shove in the right direction.

If you try this new life learn how to get the best of mosquitoes and flies, to always have dry wood on hand, and to cut wood without standing in a tub. You will then be well on your way.

It is to the credit of Bradford Angier that he has avoided describing some of the more complicated techniques of log construction. And everything that he tells us is described by text and drawings in simple terms.

Mr. Dowler is an expert in log construction who lives in Alberta.

IMAGE OF CANADA, a Book of Photographs, compiled and edited by Malvina Bolus for the Canadian Geographical Society. Ryerson Press, Toronto. 224 pages.

Reviewed by George Hunter

CANADA is very much in need of good picture books to help interpret this country both to Canadians and to the peoples of other lands. Most European countries and the United States have many documentary picture books; but Canada, with its growing importance as a world leader, has very little in the manner of pictorial publications to illustrate and record the country's tremendous expansion and development.

It was therefore with great expectation that I picked up a copy of *Image of Canada*. The jacket is attractively designed with a colour photograph of the recent Royal Visit to Ottawa. The foreword by the Governor-General and the introduction by Wilfred Eggleston set the theme that a picture book on Canada should follow.

A close study of the book reveals many truly excellent photographs; but even after reading it through several times, I haven't been able to draw from it a clear picture of what Canada looks like or what we Canadians do and think about. Although the book is divided into five sections, I. A Mari Usque Ad Mare; II. The Natural Divisions; III. The Natural Resources; IV. The Human Resources; and V. The Capital, I find much to be desired in the way of continuity. The 224 pages have been crammed with 342 photographs and sketches and the layout tends to become monotonous.

This selection of pictures, it seems to me, is more of an historical recollection of Canada than a true image of Canada today. Where are scenes from the tremendous Kemano-Kitimat project, the Seven Islands to Labrador and Lynn Lake railway developments, the uranium exploration and mining, aircraft and electronic production for which Canada is becoming noted?

Although Eskimos and Indians are favorite picture subjects of mine, I found an overbalance of photos of these people—a choice which might magnify the belief held by many outside Canada that whites are in the minority to natives. The mood of our keen, vibrant, energetic and youthful nation seems sadly lacking.

Perhaps the chief reason for any faults the book may have is that the editor was restricted in her choice of pictures. All of them have appeared at some time or other in the *Canadian Geographical Journal*; in fact, the plates were kept and reprinted in this book. Miss Bolus, who is assistant editor of that magazine, is indeed to be congratulated on bringing this set of pictures together; it is only to be regretted that her source of supply made it impossible to portray with justice the gigantic industrial nation that Canada is becoming today.

ERNEST THOMPSON SETON'S AMERICA, edited by Farida A. Wiley. Thomas Nelson & Sons, Toronto and Devin-Adair Company, New York, N.Y. 413 pages.

Reviewed by Clarence Tillenius

THIRTY-FIVE years ago, by the light of a smuggled candle, an elder brother graciously permitted the reviewer to share with him the forbidden pleasure of reading in bed a book borrowed that day from the school library. The book was *Rolf in the Woods* and when it was finished, two boys had become captive forever of an enchanted world—the incomparable animal world of Ernest Thompson Seton.

Mr. Hunter is a free lance photographer who has covered much of Canada and whose photos have appeared in recent Beavers.

There exists hardly a yardstick by which one may measure this extraordinary man. A fine painter of animals: but there have been many great animal painters. A great writer: but there have been greater. Great naturalist: yet here again he shared honours with others. Lecturer and storyteller, poet and explorer, trapper and humanitarian, skeptic and yet profoundly religious. Perhaps the secret of his unique gift lies in the way his writings lay hold on the imaginations of men.

Certainly no one with a spark of feeling for nature ever put down a book of Seton's without a tremendous quickening of interest and sympathy for the wild. His writings are timeless. More than fifty years have passed since *Biography of a Grizzly* was first published: only the other day I saw my young son in tears reading about the death of Grizzly Wahb.

So powerful and uncompromising a personality as E. T. S. could be expected to make enemies, as well as friends. He did. Yet in spite of inevitable clashes with other scientists there can be few today who do not acknowledge with gratitude the debt owed by wildlife scholars throughout the world for such a tremendous work as his *Life Histories of Game Animals*. The last named work alone, not counting preparations and research covering a period of nearly sixty years, took seven years of working, seven days a week from eight in the morning till late each night.

A glance over Seton's life work leaves one amazed. Over 40 books published (all illustrated by himself), as well as many hundreds of magazine articles, scientific treatises, and other writings. Yet in Seton Village on the 2500-acre ranch near Santa Fé, New Mexico, are his daily journals—over 50 bound volumes dating from 1881—and, in addition, nearly *seven thousand* drawings and paintings, not counting the many in private collections and public institutions.

To present in a definitive anthology, a true picture of this man's scope, would challenge the ablest editor. With very few reservations, Farida A. Wiley's *Ernest Thompson Seton's America* meets this challenge. These reservations are nevertheless important.

Seton produced some exceptional animal pictures; why is such a meagre selection reproduced—and these not his finest work? Neither are all the writings representative of Seton at his best: but here the editor may perhaps rightly urge that the life work of even a genius does not consist of masterpieces alone. In any case, the inclusion of such great wolf stories as "Lobo" and "Badlands Billy" makes up for those of lesser excellence.

An unfortunate inclusion, however, is Julia M. Seton's version of "The Mackenzie River Ghost"—a story told Seton by his friend, that grand old man of the H B C, Roderick Macfarlane. For an example of how a story may be corrupted in the retelling, *Beaver* readers can turn to the September, 1939 issue and read the true version as written by Macfarlane himself.

It is the hope of the reviewer that Miss Wiley's book will bring to many, to whom Seton may be but a name, the unforgettable experience of reading for the first time this great interpreter of the life of the wild.

Dr. Leechman, archaeologist of the National Museum in Ottawa, has travelled widely in the N.W.T. and the Yukon.

THROUGH ALASKA'S BACK DOOR, by B. F. Ederer, Vantage Press, New York, 1954, 162 pages.

Reviewed by Douglas Leechman

THIS is an account of a noteworthy canoe trip undertaken during the summer of 1939 (though the date is never given and must be deduced from internal evidence), when the author and his cheechako companion travelled down the Mackenzie, over the Pass to the Porcupine, down to Fort Yukon, and back by way of Whitehorse and Juneau. The author claims that his record of fifty days from the Mackenzie to Fort Yukon had never been equalled, the previous record being fifty-five days.

There are plenty of first-hand observations and much useful information is included. Whether the author depended on his memory or on his journal for his facts is difficult to guess, for the book abounds with mistakes, some due perhaps to carelessness, others to sheer misapprehension. There is no point in listing all of them, but the reader should be warned that the only facts he may take as valid are those that he himself is in a position to check, either from personal knowledge or from reliable sources.

We are told, for instance, that Franklin's ships, *Erebus* and *Terror* lie "somewhere on the bottom of the icebound Coronation Gulf." The author travelled from Edmonton to Waterways on "the continent's most northerly interior railroad," from which we must assume that the White Pass and the Alaska Railroad, both of which he encountered later, are somehow excluded from the contest. What's more, he informs us that the train he was on had no schedule, which will come as a shock to the Board of Transport Commissioners.

Fort Good Hope, we are assured, is peopled by Indians of the Har-Skin tribe. We read of the famous flyer "Lop" May, and of Baille Island. Such misspellings are legion: Camsel, Quart-faurch (Quatre fourches) Channel, and Sandy(s) Wunsch.

The sternwheeler *Distributor* is referred to as a "schooner." We are told that the Russians, rather than the Americans, pointed out that Fort Yukon was on the wrong side of the 141st meridian. Doctor Livingstone, who was then at Aklavik, is introduced as "the governor of the Canadian Western Arctic" and we are told that "he had held almost every post from Greenland to Alaska."

Possibly the gem of the collection is "a famous landmark, mentioned in Alexander Mackenzie's writings. It is a large black rock called 'Roche-qui-trempi-a-lieu'* (rock which has sunk into place)." We are grateful for the translation.

This by no means exhausts the list of mistakes, for I have passed by many without mention, and did not check other points about which I felt dubious. One wonders whether Dr. Ederer, who must have training in science since he is a dentist by profession, feels that accuracy of statement is unimportant, or supposes that he is writing of a country so remote and so little known that his errors will never be revealed.

*Roche qui trempe à l'eau.

THE PEDLARS FROM QUEBEC AND OTHER PAPERS ON THE NOR'-WESTERS, by W. Stewart Wallace, Ryerson, Toronto, 1954. 101 pages.

Reviewed by G. de T. Glazebrook.

IN 1934 Mr. Wallace edited the *Documents relating to the North West Company*, published by the Champlain Society. Since that time he has continued to study that interesting "concern," and from time to time published articles on its leading characters and its activities. The present volume consists of a series of essays, most of which appeared first in periodicals. The first of these indicates the story of the early "pedlars," the men who took over the French fur trade after the fall of Quebec and Montreal and made their way into the North West, running into the trading area of the Hudson's Bay Company. This pioneer article, printed before the author's *Documents*, has been revised in the light of later information.

Then follow essays on some of the leading Nor'Westers. Peter Pond, who "closely resembled the modern American gangster," was implicated in two murders. Simon McTavish, "one of the great figures of Canadian history," became the richest man in Montreal, but did not live to complete the mansion he started on the flank of Mount Royal. In the fourth essay the causes of the break between McTavish and Alexander MacKenzie are examined. Mr. Wallace next examines the suggestion, first put forward by J. N. Wallace, that there were two Simon Frasers, both partners in the North West Company; and finds in the end —on the basis of a variety of sources—that there were in fact five.

In the sixth essay the firm of Forsyth, Richardson and Company is given a background and a role in the fur trade. Through the history of this partnership we are led to the end of the North West Company in its union with the Hudson's Bay Company. Finally in the group of papers is an interesting one on the Indian wives of the Nor'Westers. The volume is completed by studies of three trading posts and the fur trade in Muskoka.

Mr. Wallace has made it clear in his introduction that this volume is not intended as a history of the North West Company. Each essay is complete in itself, and each—showing the author's careful scholarship and relentless pursuit of sources—adds appreciably both to our factual knowledge of that interesting group of men and also to an understanding of the drama in which they were principal actors. There remains controversial ground on which Mr. Wallace does not touch here: the success of the different methods employed by the Nor'Westers and the Hudson's Bay Company, and the reasons for the virtual victory of the latter. It is to be hoped that Mr. Wallace will again take up his pen and express an opinion on these and some other aspects not dealt with in this volume. No one is more qualified to speak.

Mr. Glazebrook of the Canadian Embassy in Washington, formerly of the University of Toronto, is an authority on fur trade history.

WAYS OF MAMMALS, by Clifford B. Moore. The Ronald Press Company, New York. 273 pages.

Reviewed by Clarence Tillenius

ON Christmas Eve, so runs an old folk belief in Sweden, the power of human speech is given to animals: or to put it better, the speech of animals becomes intelligible to men. If this were truly so, much that is now forever hidden in the lives of animals would suddenly be revealed to us. Or would it? Human language is extremely flexible and revealing: yet it would be a bold man who would claim to understand unerringly the workings of the mind of even so intimate an acquaintance as his wife.

Man has always cherished an active curiosity about the ways and customs of the animals that share this planet with him. Sometimes frankly invented, sometimes recounted as sober truths, the legends and explanations of animal behaviour that are the inheritance of every race are an interwoven tissue of fact and fancy. Probably there will never be such a thing as "the truth about animals."

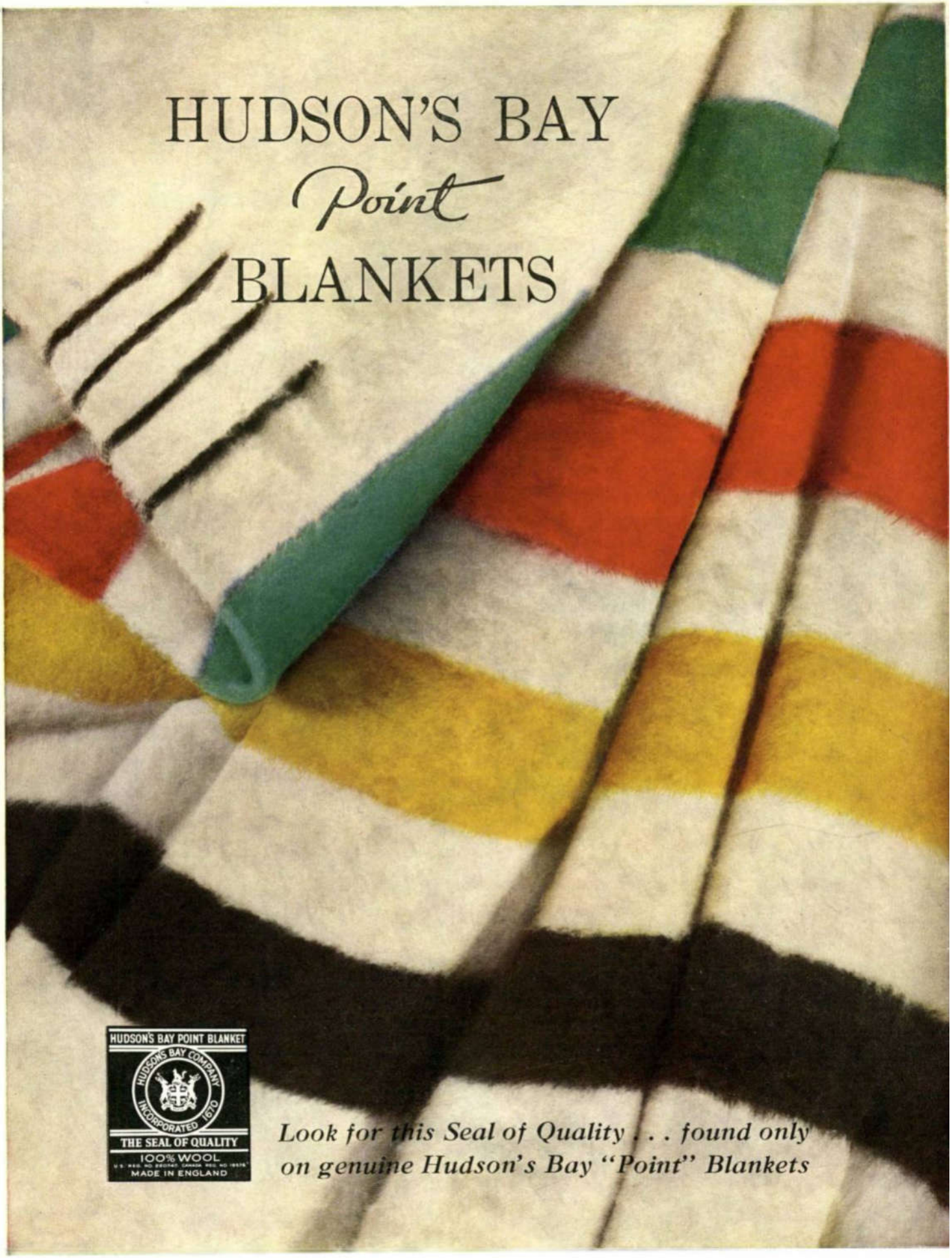
In *Ways of Mammals*, Dr. Clifford B. Moore, director of the Forest Park Museum at Springfield, Mass., presents an interesting collection of beliefs people hold and have held about animals. Occasionally he adds some pertinent side comment as editor. The nature of the book makes for unevenness and some chapters outdo others considerably in interest. One such deals with hibernation and habits of the black bear and contains many novel and provocative observations by former bear hunter J. R. Matson. This is an excellent chapter; and since a generally high level of reader interest is sustained through the book, a personal gripe may be permitted the reviewer.

This is directed at a certain superior tone which now and then crops up in the book. For instance (page 99) in making reference to Ernest T. Seton's *Wild Animals I Have Known*, in which appears a story of a fox leading hounds to their death under an oncoming train, the editorial comment runs thus: "It was never made clear, to those who carefully and objectively analyzed this fox story, just where the fox procured a copy of the railroad time-tables or how he so conveniently managed to get his enemies started in pursuit of him precisely at train time." This is being needlessly picayune: good reading is not necessarily a compilation of meticulously recorded facts. Moreover, it compounds the error by implying that a fox is incapable of connecting a daily event (in this case, a backwoods local train) with a certain time of day. No one who has seen mules stop work at a certain recognized hour and refuse to pull a step further, would concede that animals have not a sense of time.

However, this slight raising of the reviewer's temperature indicates that the book passes one important test—it stimulates.

Mr. Tillenius is one of Canada's foremost animal artists whose work has often been seen in these pages.

"The Trapper's Bride," from the painting by Alfred Jacob Miller done in 1850 from sketches made in 1837. It is reproduced here through the courtesy of Mr. and Mrs. Clyde Porter.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